

Bringing Roberts Bank's Migratory Birds to the Forefront of Environmental Assessment

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Introduction

Roberts Bank spans from the southern arm of the Fraser River to the Canada/United States border adjacent to Tsawwassen. This dynamic ecosystem includes critical biofilm deposits, eelgrass meadows, intertidal marshes, sand flats and mudflats that host millions of migratory birds each year.¹ However, the construction of Port Metro Vancouver (PMV)'s Superport and BC Ferries' Tsawwassen terminal has already fragmented key habitat and reduced habitat area and quality.² There is substantial concern that further development, such as the proposed Terminal 2 Project, will exacerbate the current environmental degradation and threaten the survival of migratory birds that frequent the area.

In response to these concerns, the federal Minister of the Environment (the Minister) has determined that the Terminal 2 Project will be subject to an environmental assessment by review panel pursuant to the *Canadian Environmental Assessment Act, 2012 (CEAA 2012)*.³ Although the Terminal 2 Project may impact many features of the environment, bringing migratory birds to the forefront of this assessment would benefit those advocating the protection of Roberts Bank. This is because Roberts Bank is internationally (and domestically) recognized as extremely significant habitat for migratory birds. Within Canada, it is one of the most important migratory bird habitats due to its unique combination of ecological features and the sheer number of birds that flock to it each year.⁴

This memorandum will outline the framework used in federal environmental assessments and discuss its application to PMV's Terminal 2 Project. Several specific arguments and key concepts that may be employed to persuade the panel and the Minister that the project should not be approved will also be discussed. By using this framework and linking arguments to the factors within it, it is hoped that the review panel's report regarding the Terminal 2 Project will unambiguously demonstrate to the Minister and Governor-in-Council that the project should not be permitted to proceed.

¹ Terri Sutherland, Robert Elner & Jennifer O'Neill, "Roberts Bank: Ecological crucible of the Fraser River Estuary" (2013) 115 *Progress in Oceanography* 171 – 180.

² IBA Canada, "Important Bird Area: Boundary Bay – Roberts Bank – Sturgeon Bank (Fraser River Estuary)" (2014) Retrieved from: <http://www.ibacanada.ca/site.jsp?siteID=BC017>.

³ *Canadian Environmental Assessment Act*, SC 2012, c 19 ("CEAA 2012").

⁴ BirdLife International, Important Bird Areas factsheet: "Boundary Bay – Roberts Bank – Sturgeon Bank (Fraser River Estuary)" (2014) Retrieved from: <http://www.birdlife.org/datazone/sitefactsheet.php?id=11056>.

1.0. Framework of Environmental Assessment

CEAA 2012 sets out the rules and procedures for federal environmental assessment. These include timelines that must be adhered to, factors that must be considered, and the duties that responsible authorities (RAs)⁵ and decision-makers must fulfill. The ultimate determination of each assessment is whether or not a project is likely to cause significant adverse environmental effects (SAEEs), and if so, whether those effects are justified in the circumstances.⁶ In a panel review, this determination occurs in two stages that are carried out by different bodies: information gathering by the Agency and decision-making by the Minister, and sometimes the Governor in Council.

1.1. Information-Gathering Stage of EA

The information-gathering stage consists of the Agency collecting information from proponents regarding their planned operations and the potential environmental effects their project may have. The panel is then required to consider various factors including:

- The environmental effects of the designated project and malfunctions or accidents that may occur in connection with it;⁷
- Any cumulative environmental effects that are likely to result from the project in combination with other physical activities that have been or will be carried out;⁸
- The significance of the effects referred to above;⁹
- Any mitigation measures that are technologically and economically feasible, and which would mitigate any of the project's significant adverse environmental effects;¹⁰
- Alternative means of carrying out the project that are feasible, and the environmental effects of these alternatives.¹¹

It should be noted that under the Act, “environmental effect” is given a restricted meaning that limits the types of project impacts that that can be assessed. In order to be captured under *CEAA 2012*, the project's effects must fall into predetermined categories, such as changes to components of the environment within federal jurisdiction.¹²

⁵ A “responsible authority” has the responsibility to conduct EAs within their area of authority. The Canadian Nuclear Safety Commission and the National Energy Board are responsible authorities for projects within the industries they regulate; the CEA Agency currently handles all other EAs (see *CEAA 2012, supra* note 3, s. 15). The CEA Agency is the responsible authority for the Terminal 2 EA.

⁶ *CEAA 2012, supra* note 3, ss. 52(1)(a) & 52(2).

⁷ *CEAA 2012, supra* note 3, s. 19(a).

⁸ *CEAA 2012, supra* note 3, s. 19(a).

⁹ *CEAA 2012, supra* note 3, s. 19(b).

¹⁰ *CEAA 2012, supra* note 3, s. 19(d).

¹¹ *CEAA 2012, supra* note 3, s. 19(g).

¹² *CEAA 2012, supra* note 3, s. 5.

Once valid environmental effects are identified then the assessment shifts to evaluating whether the effects reach the threshold of being adverse, significant, and likely. Although the concepts of adverse, significant, and likely are closely linked in environmental assessment, the RA and the Minister follow them as three separate lines of inquiry to ensure that the analysis does not get muddled; the Agency has made clear that “the test is not of ‘significantly adverse’ effects, but of adverse effects that are significant...[t]he ‘likely’ applies to the environmental effects of the project that are both adverse and significant.”¹³

1.1.1. Factors to Determine “Adverse” Effects

The Agency lists the following changes in the environment as major factors that should be considered by the RA in determining whether a project’s environmental effects are adverse:¹⁴

- Negative effects on the health of biota including plants, animals, and fish;
- Threat to rare or endangered species;
- Reductions in species diversity or disruption of food webs;
- Loss of or damage to habitats, including habitat fragmentation;
- Discharges or release of persistent and/or toxic chemicals, microbiological agents, nutrients, radiation, or thermal energy;
- Population declines, particularly in predator, large or long-lived species;
- Decreased aesthetic appeal (e.g. views);
- Loss of or damage to commercial species;
- The removal of resource materials from the environment;
- Transformation of natural landscapes;
- Obstruction of migration or passage of wildlife;
- Negative effects on the quality and/or quantity of the biophysical environment.

An RA will use these factors in comparing the current quality of the environment to the quality that is predicted if the project goes forward.¹⁵ Sometimes information from similar circumstances may be used in this comparison as well.¹⁶

1.1.2. Factors to Determine “Significant” Effects

There is no single comprehensive method of assessment that ensures a consistent evaluation of “significance”. This is because “each set of circumstances requires a different type of

¹³ Canadian Environmental Assessment Agency, “Reference Guide: Determining whether a project is likely to cause significant adverse environmental effects” (2012) Retrieved from <https://www.ceaa-acee.gc.ca/default.asp?lang=En&n=D213D286-1> (“CEA Agency Reference Guide”) at p. 2.

¹⁴ CEA Agency Reference Guide, *supra* note 13, at p. 3.

¹⁵ CEA Agency Reference Guide, *supra* note 13, at p. 3.

¹⁶ CEA Agency Reference Guide, *supra* note 13, at p. 3.

assessment”; as such the process of assessment is “a flexible and sometimes confusing one”.¹⁷ However, regardless of the method selected by the RA, the Agency recommends the following factors to be considered in determining whether an environmental effect is “significant”:¹⁸

- Magnitude: more severe effects (e.g. major, catastrophic) are considered significant;
- Geographic Extent: widespread effects (e.g. acid rain) are generally more significant than localized ones;
- Duration and Frequency: longer term and more frequent effects may be significant;
- Reversibility: irreversible effects may be more significant;
- Ecological context: effects may be significant if the area has already been negatively influenced by human activities or the ecosystem is fragile and less able to withstand stressors.

1.1.3. Factors to Determine “Likely” Effects

Likelihood is determined according to probability and scientific uncertainty; unsurprisingly, higher probability indicates higher likelihood. Scientific uncertainty is included as a factor because the Agency accepts that perfect forecasting of effects is not possible and so the level of confidence in these forecasts is considered in the assessment as a way to keep embellished predictions from derailing the process.

1.2. Decision-Making Stage of EA

At the decision-making stage, the Minister must conclude whether or not the project is likely to cause SAEs. He or she does this based on the report prepared by the Agency during the information-gathering phase of the assessment. If the Minister concludes that the project is likely to cause SAEs, then it is left to the Governor in Council to decide whether or not the circumstances justify allowing the project to proceed anyway.

Canadian courts have afforded considerable deference to findings of significance by an RA or Minister and justification by the Governor-in-Council.¹⁹ This stems from the view that a court “is not an academy of science to arbitrate conflicting scientific predictions or...to weigh expressions of public concern and determine which ones should be respected”.²⁰ Rather, in order to quash the Governor in Council or Minister’s decision, a court would have to find that:²¹

¹⁷ *Bow Valley Naturalists Society v. Canada (Minister of Canadian Heritage)*, [2001] 2 FCR 461 (FCA), at para 77.

¹⁸ CEA Agency Reference Guide, *supra* note 13, at p. 3.

¹⁹ *Vancouver Island Peace Society v. Canada*, [1992] 3 FC 42.

²⁰ *Vancouver Island Peace Society*, *supra* note 19, at para. 12, cited with approval in *Council of the Innu of Ekuanitshit v. Canada (Attorney General)*, 2014 FCA 189 (“*Council of the Innus*”), at para 94.

²¹ *Council of the Innus*, *supra* note 20, at para 76.

- *CEAA 2012*'s statutory process was not properly followed before the decision;
- The decision was made without regard for *CEAA 2012*'s purposes; or
- The decision had no reasonable basis in fact, making it "tantamount to an absence of good faith".

This is a relatively high standard that would likely be met only in exceptional circumstances. Therefore, it is important to put forward clear arguments linking *CEAA 2012*'s processes and purposes to evidence of adverse, significant and likely environmental effects in order to ensure that they are fully and adequately considered during the assessment process.

2.0. Application of Framework to Roberts Bank

As noted above, the Terminal 2 Project is a designated project under *CEAA 2012* and will undergo an environmental assessment by review panel. In addition, section 5(1)(a)(iii) of *CEAA 2012* brings changes affecting migratory birds into the realm of the "environmental effects" that the panel is statutorily required to consider.²² As such, the Agency's framework can be applied to Roberts Bank's migratory birds to determine if these environmental effects will be adverse, significant and likely. The remainder of this memorandum will put forward arguments as to why these criteria are met and why the Governor-in-Council should conclude that these effects are not justified in the circumstances. A discussion of likelihood will be omitted because the scientific methods for effective forecasting are beyond the scope of this memorandum.

2.1. *The Project's Environmental Effects will be Adverse*

While a full assessment of how adverse environmental effects are requires a scientific analysis, a cursory overview of several relevant factors below demonstrates how the test for "adverse" effects may be met.

Threat to rare or endangered species.

Although Roberts Bank has not been identified as critical habitat for any endangered or threatened migratory bird species under the *Species at Risk Act* ("*SARA*"),²³ several of these species have been recorded in the area, including harlequin ducks, horned grebes, marbled murrelets, red knots, and Ross's gulls.²⁴ In addition, there is an established nesting colony of Great Blue Herons (listed as Special Concern under *SARA*) that feed in the intertidal areas along Roberts Bank.²⁵

²² *CEAA 2012*, *supra* note 3, s. 5(1)(a)(iii).

²³ *Species at Risk Act*, RSC 2002, c 29.

²⁴ Fisheries and Oceans Canada & Environment Canada, *Deltaport Third Berth Expansion Project: Comprehensive Study Report* (2006) Retrieved from: <http://www.robertsbankterminal2.com/wp-content/uploads/DP3-Comprehensive-Study-Report.pdf>.

²⁵ IBA Canada, *supra* note 2.

Reductions in species diversity or disruption of food webs.

Disruption of food webs appears to be a serious concern regarding the Terminal 2 project. PMV's Project Description notes that intertidal food sources are likely to be affected.²⁶ In particular, recent studies indicate that further development is likely to degrade the quality and disrupt the dispersal of biofilms, which contribute up to 59% of the Western Sandpiper's diet on Roberts Bank.²⁷

Loss of or damage to habitats, including habitat fragmentation.

PMV predicts a direct loss of intertidal foraging habitats and habitat loss surrounding the Terminal 2 Project footprint.²⁸ Terminal 2 is also likely to exacerbate the habitat fragmentation that has already occurred with the construction of the causeways leading to PMV's Superport and BC Ferries Tsawwassen terminal by changing tidal currents and blocking the Fraser River plume, which is critical to biofilm growth.²⁹

Obstruction of migration or passage of wildlife.

PMV anticipates increased bird mortality attributable to collisions, though their Project Description does not indicate whether these are expected to be collisions with electrical lines, ships, or other structures.³⁰ In any case, these may obstruct the migration and passage of birds through Roberts Bank.

The significance of each factor will vary from assessment to assessment but even from this brief overview, it is fairly clear that the expected environmental effects are adverse in nature. That is, the quality of the Roberts Bank environment in its current state appears to be higher than in its anticipated state if the project proceeds. In addition, studies have shown that the original coal port construction and subsequent expansions have already contributed to diverting the Fraser River plume, increased eelgrass coverage and increased silt content.³¹ These changes have not been beneficial for migratory birds but instead made Roberts Bank a less safe and sustaining habitat. For this reason it would appear that the test for "adverse" environmental effects would be satisfied in these circumstances.

2.2. The Project's Adverse Environmental Effects will be Significant

The determination of significance is arguably the most substantial line of inquiry during environmental assessment. Although there is no set method for evaluating this factor, the Agency notes that the most common process is to use environmental standards, guidelines and

²⁶ Port Metro Vancouver, *Roberts Bank Terminal 2 Project Description Executive Summary* (2013) Retrieved from: <http://www.ceaa-acee.gc.ca/050/documents/p80054/94520E.pdf>, at xxxvi.

²⁷ Sutherland *et al.*, *supra* note 1 at 176 & 179.

²⁸ Port Metro Vancouver, *supra* note 26 at xxxvi.

²⁹ Port Metro Vancouver, *supra* note 26 at xxxv; Sutherland *et al.*, *supra* note 1 at 175-176.

³⁰ Port Metro Vancouver, *supra* note 26 at xxxvi.

³¹ Sutherland *et al.*, *supra* note 1 at 172.

objectives as indicators of significance and as a way to consider the general factors of the framework.³² Furthermore, the Agency notes that “environmental due diligence should take into consideration legal requirements” such as “legislative and regulatory requirements” set by any level of government.³³ Using this method in the context of the Terminal 2 Project may be desirable for those wishing to protect migratory birds because of the considerable number of legal regimes and less formal objectives and guidelines applicable to Roberts Bank and the surrounding area.

The following sections will seek to apply this method by canvassing the various environmental standards and designations that concern Roberts Bank and its importance to migratory birds. If the Terminal 2 Project breaches or would operate in stark contrast to any of these standards, it may be argued that there are grounds for the panel to conclude that the Project’s adverse environmental effects are significant.

2.2.1. Migratory Birds Convention Act and its Regulations **Migratory Birds Convention Act s.5.1 and Migratory Bird Regulations s.35**

The *Migratory Birds Convention Act* (“*MBCA*”)³⁴ is the most direct and likely source of protection for migratory birds in Canada. It is a piece of federal legislation that implements the Convention for the Protection of Migratory Birds that was negotiated in 1916 to address the drastic decline of several migratory bird species in the United States and Canada due to over-hunting. Birds protected under the *MBCA* are listed in Article I of the treaty and many of these species have been observed along Roberts Bank.³⁵

The *MBCA* establishes several prohibitions, most of which would be inapplicable to the Terminal 2 Project proposed in the Roberts Bank area as they are intended to restrict the hunting, taking and possession of migratory birds. However, section 5.1(1) of the Act is extremely relevant; it states that:³⁶

No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

Section 5.1(2) expands this prohibition to include the deposit of any substance that, when

³²CEA Agency Reference Guide, *supra* note 13, at p. 3..

³³Canadian Environmental Assessment Agency, “Operational Policy Statement: Projects on Federal Lands Outside Canada Under the Canadian Environmental Assessment Act, 2012” (2013) Retrieved from: <https://www.ceaa-acee.gc.ca/default.asp?lang=En&n=22CA364E-1>.

³⁴*Migratory Birds Convention Act*, RSC 1994, c 22.

³⁵Fisheries and Oceans Canada & Environment Canada, *supra* note 24.

³⁶*Migratory Birds Convention Act*, *supra* note 34, s. 5.1(1).

combined with others, becomes harmful to migratory birds.³⁷

Section 5.1(3) exempts deposits which have been authorized under the *Canada Shipping Act, 2001* or any other Act of Parliament, or by the Minister for “scientific purposes”.³⁸

Case law aiding in the interpretation of section 5.1 is quite limited – the only case being *R v. Syncrude (Syncrude)*³⁹; this case expands upon section 5.1(1) in its analyses of what constitutes an area frequented by migratory birds. Note that there is currently no case-law to date which deals with the exception found under section 5.1(3) as the Aurora Settling Basin in *Syncrude* was authorized under Provincial Acts⁴⁰, rather than an Act of Parliament. While *Syncrude* is the only piece of litigation dealing with section 5.1 of the *MBCA*, interpretation of this provision may be guided by case law dealing with the now repealed section 35 of the *Migratory Bird Regulations*.⁴¹ Sections 5.1(1) and (2) of the *MBCA* largely replicate the repealed s.35 of the *Migratory Bird Regulations*.⁴² *Syncrude*, and the section 35 case law will be discussed below.

Summary of Case Law

Courts have generally supported a broad interpretation of environmental legislation to ensure its efficacy despite changing circumstances and scientific uncertainty.⁴³ The *MBCA* is no exception. The Federal Court stated that there is a “clear intention to provide wide protection to migratory birds...and therefore a wide interpretation should be given.”⁴⁴

INTERPRETATION OF ‘DEPOSITING A SUBSTANCE’

“Deposit” is broadly defined in the *MBCA* as “any discharging, spraying, releasing, spilling, leaking, seeping, pouring, emitting, emptying, throwing, dumping or placing.”⁴⁵ Therefore it seems that a wide variety of “substances” of various forms and compositions may be deposited. In support of this idea, it is worth noting that the section 35 of the *Migratory Bird Regulations* referred to “oil” and “oil wastes” as examples of harmful substances but after this section was

³⁷ *Migratory Birds Convention Act*, *supra* note 34, s. 5.1(2).

³⁸ *Migratory Birds Convention Act*, *supra* note 34, s. 5.1(3).

³⁹ *R v. Syncrude*, 2010 ABPC 229.

⁴⁰ *Alberta Environmental Protection and Enhancement Act*, RSA 2000, c E-12; *Alberta Oil Sands Conservation Act*, RSA 2000, c O-7,

⁴¹ *Migratory Bird Regulations*, CRC, c 1035.

⁴² Before it was repealed in 2005, s.35 of the *Migratory Bird Regulations* read as follows:

35.(1) Subject to subsection (2), no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.

35.(2) Subsection (1) does not apply to the deposit of a substance of a type, in a quantity and under conditions authorized by

(a) regulations made by the Governor in Council under any Act for any waters in respect of which those regulations apply; or

(b) the Minister for scientific purposes

(*Migratory Bird Regulations*, CRC, c 1035, s.35, Repealed by SOR/2005-198, s.5).

⁴³ *R v. J.D. Irving*, 2008 CarswellNB 322, [2008] NBJ No. 371.

⁴⁴ *Alberta Wilderness Association v. Cardinal River Coals Ltd.*, [1999] 3 FC 425, at para 102.

⁴⁵ *Migratory Birds Convention Act*, *supra* note 34, s. 2(1).

replaced by section 5.1 of the *MBCA*, these examples were removed. This may suggest that Parliament's intention regarding the new provision is to ensure that "substance" captures a wide range of materials, not just those similar to oil or oil waste.⁴⁶ In *Alberta Wilderness Association v. Cardinal River Coals Ltd. (Alberta Wilderness Association)*⁴⁷, a case dealing with the interpretation of section 35 of the *Migratory Bird Regulations* – largely replicated in section 5.1 of the *MBCA*, the Court found that the words "any other substance" should be given a wide interpretation, and therefore that "any substance...is capable of being prohibited if it is 'harmful'."⁴⁸

However, note that not every installation will be considered the depositing of a substance. In *Goodsman v. Saskatchewan Power Corp.*, the court ruled that "the installation of a power line" does not amount to "the depositing of 'any other substance' such as oil or oil wastes" under section 35 of the *Migratory Bird Regulations*.⁴⁹ Similarly, in *British Columbia Transmission Corp. v. Lemoignan*, the court ruled that the *MBCA* does not extend authority to the federal government "to approve or disapprove of the construction of structures which will have the inevitable effect, in all likelihood, of interfering with flight and perhaps interfering with the lives of one or more migratory birds."⁵⁰

INTERPRETATION OF "A SUBSTANCE HARMFUL TO MIGRATORY BIRDS"

The next step is determining whether the deposit of a substance is harmful to migratory birds; whether a substance is harmful as per the Act depends on the facts of each case.⁵¹ Case law dealing with section 35 of the *Migratory Bird Regulations* seems to indicate that in order to be deemed "harmful to migratory birds", the harm must be sufficiently serious and go beyond being detrimental to only a few birds and their nests. The deposit need not be large, so long as it is found harmful to migratory birds; for example, in *R. v. Neptune Bulk Terminals (Canada) Ltd. (Neptune)*, it was found that "a very small amount of canola oil can be harmful" to birds.⁵²

Oils are not the only substances which can be deemed to be harmful to migratory birds; while rock is an inert substance, in *Alberta Wilderness Association* millions of tonnes of waste rock that would be deposited into several creek beds and a valley was deemed to be a harmful substance within the meaning of section 35 of the *Migratory Bird Regulations* because it

⁴⁶ Note: Legislative evolution is sometimes used by courts in statutory interpretation to determine Parliament's intention regarding a piece of legislation. For example see *Canada (Attorney General) v. Mowat*, 2011 SCC 53.

⁴⁷ *Alberta Wilderness Association v. Cardinal River Coals Ltd.*, [1999] 3 FC 425.

⁴⁸ *Alberta Wilderness Association v. Cardinal River Coals Ltd.*, [1999] 3 FC 425, at para 102.

⁴⁹ Note that this case went up to the Saskatchewan Court of Appeal, however, the issue of whether the building of power lines engaged the *MBCA* was not addressed. Instead, the case was decided on the fact that due to the high number of migratory birds in the area, the 57 birds expected to be killed by the line were considered to be statistically biological insignificant (*Goodsman v Saskatchewan Power Corp.*, 1997 CarswellSask 100, [1997] S.J. No. 2014, at para 7; *Goodsman v Saskatchewan Power Corp.*, 1997 CarswellSask 107, 140 W.A.C. 143, at para 4).

⁵⁰ *British Columbia Transmission Corp. v Lemoignan*, 2008 CarswellBC 1598, 2008 BCSC 1045, at para 17.

⁵¹ *Alberta Wilderness Association v. Cardinal River Coals Ltd.*, [1999] 3 FC 425, at para 103.

⁵² *R. v. Neptune Bulk Terminals (Canada) Ltd.*, 2001 BCPC 64, at para 36.

constituted “a threat to the preservation of the migratory birds that nested there.”⁵³ The site at issue was a recognized nesting ground of a regionally significant population of harlequin ducks that had already declined in number due to loss of similar habitat.

Another more recent piece of case law dealing with an interpretation of section 35 of the *Migratory Bird Regulation* is *Pembina Institute for Appropriate Development v. Canada (Pembina Institute)*. This case picked up the interpretation of substance used in *Alberta Wilderness Association*, though was distinguished on the facts. The court ruled that the waste rock in *Pembina Institute* was not a harmful substance because it related to a mine pit rather than an large access corridor and involved a comparably lower quantity of rock than was the case in *Alberta Wilderness Association*; the lesser amount of rock and the smaller area to be covered led the court to declare that it was unlikely the rock deposited would cause harm to migratory birds.⁵⁴

INTERPREATION OF ‘AN AREA FREQUENTED BY MIGRATORY BIRDS’

As to what constitutes an “area” frequented by migratory birds, the court in *Synchrude* determined that although it is a contextual determination, ‘area’ in this instance should at a minimum include “the space over, on, or adjacent to the deposit of the harmful substance, close enough to the deposit for migratory birds in that space to be attracted to the specific location of the harmful substance”.⁵⁵

“In terms of what it means for an area to be “frequented by migratory birds”, the court in *Synchrude* accepted the dictionary definition of ‘frequent’: “to associate with, be in, or resort to often or habitually; visit often”.⁵⁶ Migratory birds were found to ‘frequent’ the ‘area’ in question in *Synchrude*; the tailings pond was within the migratory path where birds were known to look for bodies of water as places of respite. This definition of ‘frequent’ seemingly imposes a threshold requirement that it is not sufficient that migratory birds might only *occasionally* or *accidentally* be found in a place where a substance has been deposited.

Migratory Birds Regulations s.6

In addition to section 5.1 of the *MBCA*, section 6 of the *Migratory Bird Regulations* may be relevant to the Terminal 2 Project. The current *Migratory Birds Regulations (MBR)* are largely concerned with setting rules for the hunting of migratory birds. However, it has been accepted that they go beyond merely regulating hunting and population control activities.⁵⁷ In *R v. J.D. Irving Ltd., (J.D. Irving)*, the Court found that while at the time of the drafting of the *MBCA* and its Regulations the main threat to the continuation of migratory birds was over-hunting, “times

⁵³ *Alberta Wilderness Association v. Cardinal River Coals Ltd.*, [1999] 3 FC 425, at para 103.

⁵⁴ *Pembina Institute for Appropriate Development v. Canada*, 2005 CarswellNat 2617, at para 33.

⁵⁵ *R v. Synchrude*, 2010 ABPC 229 at para 91.

⁵⁶ *R v. Synchrude*, 2010 ABPC 229 at para 91.

⁵⁷ *R v. J.D. Irving*, 2008 CarswellNB 322, [2008] NBJ No. 371.

change” and “different threats to migratory birds arise”.⁵⁸ The Court states that the *MBCA* and its Regulations are meant to conserve and preserve “migratory birds from threat to their habitat and nesting and breeding grounds...”; it is “not merely hunting legislation” but also, environmental legislation.⁵⁹ The Regulations thus also cover “any means by which large populations are killed or exterminated through reckless or wanton human actions, whether aimed specifically at migratory birds or not.”⁶⁰

Section 6 of the Regulations can be an example of this way of thinking about the Regulation; section 6 prohibits any person from disturbing, destroying or taking a migratory bird’s nest, egg or nest shelter.⁶¹ Contraventions of this provision may only be authorized by specific types of permits listed in Schedule II of the Regulations.⁶² None of these authorizations permit “incidental take” which is the inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs by human activities not aiming to have such effects.⁶³ This puts the onus on industry actors to ensure that their activities, even if approved by environmental assessment, do not violate the Regulations.

Case law addressing the provision is sparse; however, in *J.D. Irving*, the court interpreted the wording of section 6 of the Regulations. They found that “nest” is defined as including “part of a nest”, regardless of composition (grass, twigs, a hole, etc.).⁶⁴ The court also found that the words “destroy” and “disturb” could be interpreted using the ordinary dictionary meaning together with the context of the use of the word: destroy is defined as “to pull down or undo, to demolish; to lay waste, to ruin; to undo, break up, reduce into a useless form, consume dissolve; to render useless; to deprive of life, to kill; to put an end to, to do away with”, and disturb is defined as “to agitate and destroy (quiet, etc.); to break up the quiet, tranquility of, to stir up, trouble, disquiet; to agitate mentally, discompose the peace of mind or calmness or; to interfere with the settled course or operation of; to deprive of the peaceful enjoyment or possession of”.⁶⁵

Implications for the Terminal 2 Project

If a likely breach of either the *MBCA* or the Migratory Bird Regulations can be demonstrated in the environmental assessment process, it may be grounds for regarding the Terminal 2 Project’s effects on migratory birds as significant.

A contravention of section 5.1 of the Act seems plausible. Roberts Bank is no doubt an “area frequented by migratory birds” as per the *MBCA*, and several substances and materials (e.g.

⁵⁸ *R v. J.D. Irving*, 2008 CarswellNB 322, [2008] NBJ No. 371, at para 27.

⁵⁹ *R v. J.D. Irving*, 2008 CarswellNB 322, [2008] NBJ No. 371, at para 27.

⁶⁰ *R v. J.D. Irving*, 2008 CarswellNB 322, [2008] NBJ No. 371, at para 26.

⁶¹ *Migratory Bird Regulations*, CRC, c 1035 s 6.

⁶² *Migratory Bird Regulations*, CRC, c 1035 s 4(1).

⁶³ Basil van Havre, “Update on Environment Canada’s Approach to the Management of Incidental Take”, 2012.

Retrieved from <http://tech.tac-atc.ca/private/environment/pdf/att8-0412.pdf>.

⁶⁴ *R v. J.D. Irving*, 2008 CarswellNB 322, [2008] NBJ No. 371, at para 21.

⁶⁵ *R v. J.D. Irving*, 2008 CarswellNB 322, [2008] NBJ No. 371, at para 21.

dredged materials, oil, fuel, waste water, air pollutants) associated with the terminal's operations would likely be deposited along the Bank at some point.

It is less clear whether a breach of section 6 of the Regulations could be made out. Although there is a nesting colony of Great Blue Herons nearby, the Bank itself does not seem to be known as nesting habitat.⁶⁶ If nests are found to be likely damaged or destroyed, the concept of incidental take would be useful in bringing PMV's Project into the realm of the activities considered under the Regulations.

If either the *MBCA* or the Migratory Bird Regulations are found likely to be breached, there will be no excuse for Canada to shirk its "...commitment to the long term conservation and protection of migratory bird populations" by "...permitting the destruction of nest, habitat, and birds who pose no threat or are causing no harm other than an *inconvenience* to industry and development".⁶⁷

2.2.2. The Species at Risk Act

The *Species at Risk Act* ("*SARA*") is federal legislation that identifies "at risk" species of wildlife and designates them as threatened, endangered, extirpated or of special concern.⁶⁸ While Roberts Bank has not yet been designated as part of the critical habitat of any *SARA* migratory bird species, several species of threatened or endangered migratory birds have been recorded on this stretch of coast, including harlequin ducks, horned grebes, marbled murrelets, red knots, and Ross's gulls.⁶⁹ As such, *SARA* contains several prohibitions that may affect Port Metro Vancouver as the owner and operator the Roberts Bank Superport and Terminal 2 if it is constructed. It also has implications for the RAs and decision-makers involved in the environmental assessment process.

Provisions Affecting PMV

SARA contains several general prohibitions that may be applicable to the Terminal 2 Project (and the Port generally), but they only apply to species listed as extirpated, endangered or threatened.⁷⁰ These prohibitions are:⁷¹

- Section 32(1): No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.
- Section 33: No person shall damage or destroy the residence of one or more individuals

⁶⁶ IBA Canada, *supra* note 2.

⁶⁷ *R v. J.D. Irving*, *supra* note 43, at para 31.

⁶⁸ *Species at Risk Act*, *supra* note 23, s. 15(1)(a)(iii).

⁶⁹ Fisheries and Oceans Canada & Environment Canada, *supra* note 24.

⁷⁰ Note: This means these protections will not apply to the Great Blue Heron as they are listed as "special concern".

⁷¹ *Species at Risk Act*, *supra* note 23, s. 32(1), 33, & 36.

of a wildlife species that is listed as an endangered species or a threatened species.⁷²

- Section 36 extends the same prohibitions from sections 32 and 33 to any provincially listed endangered or threatened species that is on federal lands.

There are no cases that explicitly consider a contravention of sections 33 or 36 and only one that deals with a section 32 offence. In that case, a corporation that owned a highly reflective building was alleged to have breached *SARA* because the building had caused multiple collision deaths of endangered and threatened species of migratory birds.⁷³ The court said that the Act was intended to include careless, accidental and involuntary killings and that a single death is enough to trigger this provision.⁷⁴ Ultimately, the corporation was found to have contravened the act but was not deemed liable because they had exercised due diligence by taking measures to decrease collisions once they were informed of the issue.⁷⁵

This has implications for the Terminal 2 Project as increased bird mortality due to collisions has been identified as a potential environmental effect of the Project. Although it is possible to apply for authorization of what would normally be an offence under sections 32, 33 and 36,⁷⁶ PMV's Project Description only indicates that authorization may be sought regarding activities affecting the critical habitat of the southern resident killer whale, not any migratory birds that have been recorded in the area. If this authorization does not extend to *SARA* listed migratory bird species, then it is possible that multiple contraventions of *SARA* will occur and this should be considered as a significant adverse environmental effect of the Terminal 2 Project.

Provisions Affecting Environmental Assessment

SARA places an additional duty on the federal authorities responsible for environmental assessment. While *CEAA* already requires that changes affecting *SARA* listed species are considered, *SARA* requires that these federal authorities must not only identify the adverse effects of a designated project on any listed species, but if the project is approved they must also ensure that measures are taken to avoid or lessen these effects and monitor them.⁷⁷ This applies to all "listed wildlife species" and so any "special concern" listings (like the Great Blue Heron nesting colony near Roberts Bank) also qualify for this special consideration.⁷⁸ Depending on the evidence of how listed species may interact with and be affected by the project, this provision could support an argument that any adverse effects on listed species should also be considered significant.

⁷² Note: Residence is defined in *SARA* section 2 as "a dwelling-place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating".

⁷³ *Podolsky v. Cadillac Fairview Corp.*, 2013 ONCJ 65.

⁷⁴ *Podolsky v. Cadillac Fairview Corp.*, *supra* note 73 at para 85.

⁷⁵ *Podolsky v. Cadillac Fairview Corp.*, *supra* note 73 at para 95

⁷⁶ *Species at Risk Act*, *supra* note 23.

⁷⁷ *Species at Risk Act*, *supra* note 23, s. 79(2).

⁷⁸ *SARA* s. 2(1) defines "listed" as being on the Schedule 1 list of Wildlife Species at Risk, which includes species of special concern.

2.2.3. Designated Areas Outside of the Terminal 2 Project Area

Roberts Bank and the surrounding areas of the Fraser River Estuary have various legal designations that provide legal protection and guidelines for habitat conservation. The Terminal 2 Project would not come within the geographic boundaries of any of these areas but they will be briefly discussed below because they are clear evidence of Roberts Bank's role as a critical habitat area for migratory birds. They may also be used in an argument supporting the significance of the environmental effects that the Terminal 2 Project would inflict on migratory birds.

Roberts Bank Wildlife Management Area

Wildlife Management Areas (WMAs) are designated pursuant to the BC *Wildlife Act*⁷⁹ as a conservation tool that sets aside designated land for the benefit of regionally to internationally significant wildlife species and their habitats.⁸⁰ Within these areas, conservation is a priority but "compatible" land uses may be accommodated.⁸¹ WMAs are typically administered using a management plan, though orders or regulations prohibiting or restricting certain activities may also be issued by the government.

A substantial portion of Roberts Bank has been designated as a WMA in large part due to its role as an "important staging and wintering area for waterfowl and shorebirds", including many migratory species.⁸² There have been no orders or regulations created in relation to it, but a general management plan is in place with the central goal being "to conserve the ecological integrity of Roberts Bank".⁸³ To achieve this goal, the management plan employs multiple discrete objectives including⁸⁴:

- "Maintain[ing] wildlife populations through protection of wildlife habitat, restoration of natural processes and, where possible, enhancement of wildlife habitats."
- "Control[ling] human activities within the Wildlife Management Area to ensure they are compatible with the overall management goal. It is important that human activities do not negatively impact upon the ecological integrity of intertidal and nearshore subtidal environments."

Even if the area in which the Port is located had been included in the WMA when the WMA was created, any of PMV's previously-granted operating rights would not have been affected.⁸⁵ As it is, the Port area was excluded from the WMA, along with a buffer zone in which Terminal 2

⁷⁹ *Wildlife Act*, RSBC 1996, c 488

⁸⁰ Ministry of Forests, Lands and Natural Resource Operations, "Wildlife Management Areas (WMAs)" Retrieved from: <http://www.env.gov.bc.ca/fw/habitat/conservation-lands/wma/>.

⁸¹ "Ministry of Forests, *supra* note 80.

⁸² Ministry of Environment, Land and Parks & BC Environment Lower Mainland Region, *Roberts Bank Wildlife Management Area Management Plan*, 1996.

⁸³ Ministry of Environment, Land and Parks & BC Environment Lower Mainland Region, *Roberts Bank Wildlife Management Area Management Plan*, 1996.

⁸⁴ Ministry of Environment, Land and Parks & BC Environment Lower Mainland Region, *Roberts Bank Wildlife Management Area Management Plan*, 1996 at page 28.

⁸⁵ *Wildlife Act*, *supra* note 79, s. 4(3).

could fit. Therefore, the WMA cannot be used to directly prevent the terminal or bring it within its management regime. However, the close proximity of the WMA to the proposed Terminal 2 site does add to the significance of Terminal 2's effects on wildlife – wildlife that will constantly be moving between the Terminal 2 footprint and important conservation areas of various types.

Fraser River Estuary Ramsar Site

The Convention on Wetlands of International Importance (aka the Ramsar Convention) is an international treaty that Canada is a party to.⁸⁶ Under the Convention, wetlands may be designated as Wetlands of International Importance (aka Ramsar sites) if they meet certain criteria.⁸⁷ The Fraser River Estuary has been designated as a Ramsar site; the site has 6 components, including Burns Bog, Sturgeon Bank, South Arm Marshes, Boundary Bay and the former Alaksen Ramsar Site (on Westham Island).⁸⁸ Alaksen receives further protection by virtue of its dual designation as a National Wildlife Area pursuant to the *Canada Wildlife Act*.⁸⁹ Roberts Bank is notably – and perhaps illogically, from a conservation perspective – absent. As a result, the conservation goals of the Ramsar Convention and the activity restrictions under the *Wildlife Area Regulations* do not directly apply to the Terminal 2 Project.

George C. Reifel Migratory Bird Sanctuary

Migratory Bird Sanctuaries may be designated pursuant to the *MBCA* if certain population requirements are met.⁹⁰ Once designated, the activities that may take place in a Sanctuary are restricted, though permits may be issued that allow activities that are harmful to migratory birds, their nests or habitat.⁹¹ One of these sanctuaries, the George C. Reifel Migratory Bird Sanctuary, has been designated on Westham Island, close the mouth of the Fraser River. Yet again, Roberts Bank's migratory birds do not receive any direct protection benefits from this designation despite its close proximity and similar conservation concerns.

The recurring theme apparent from these designations is that they cannot be used to extend protection for migratory birds outside their geographical boundaries. It would not be appropriate in the context of environmental assessment to debate the merits of excluding Roberts Bank from these areas, however, it may be worth mentioning these designations to emphasize that the Fraser River Estuary as a whole is a critical ecosystem. Roberts Bank and the

⁸⁶ See Environment Canada, “International Programs and Conventions” (2013) Retrieved from: <https://www.ec.gc.ca/habitat/default.asp?lang=En&n=7127734D-1>.

⁸⁷ The Ramsar Convention Secretariat, “The Ramsar Sites Criteria” (2014) Retrieved from: http://www.ramsar.org/sites/default/files/documents/library/ramsarsites_criteria_eng.pdf.

⁸⁸ The Ramsar Convention Secretariat, “Fraser River Delta” (2012) Retrieved from: <https://rsis.ramsar.org/ris/243>.

⁸⁹ RSC 1985, c W-9, s. 2; *Wildlife Area Regulations*, CRC, c 1609, Schedule I, Part VIII.

⁹⁰ Migratory Bird Sanctuaries are created by regulation. Environment Canada applies several criteria to assess the migratory bird population in an area, and if suitable may recommend that the Minister amend the regulations to establish the sanctuary – see Environment Canada, “Migratory Bird Sanctuaries Selection Criteria” (2013) Retrieved from: <https://ec.gc.ca/ap-pa/default.asp?lang=En&n=4A084945-1>.

⁹¹ *Migratory Bird Sanctuary Regulations*, CRC, c 1035, s 10(1).

land on which the current Port and proposed terminal would sit cannot be viewed in isolation of this; they are key components of this ecosystem and this should be given some weight in the review panel's assessment of significance.

Additionally, even though the Terminal 2 Project is not necessarily legally constrained by any of these designations, the Project potentially hinders their goals and purposes to conserve and protect parts of the Fraser River Estuary. Put another way, the Terminal 2 Project's environmental effects constitute serious barriers that directly undermine the efficacy of these legally designated areas (especially the Roberts Bank WMA), and the panel should recognize this as significant.

2.2.4. Other Designations of Roberts Bank as Significant Bird Habitat – Scientifically and Morally Compelling

As discussed above, the area in which the Roberts Bank Superport sits and where the proposed Terminal 2 would be built are not protected under any legally binding environmental designation. However, this does not necessarily mean that this area is less important or unworthy of similar distinctions. In fact, there are several scientifically and morally compelling designations that do encompass *the entirety of Roberts Bank* and do not specifically exempt the area surrounding PMV's Port operations.

One of these designations comes from the Western Hemisphere Shorebird Reserve Network (WHSRN). The WHSRN is a conservation strategy specifically aimed at protecting shorebirds and their habitat. As a part of this strategy, critical shorebird habitat may be designated as sites of regional, hemispheric, or international importance.⁹² Roberts Bank meets the criteria for hemispheric importance and as a result is part of the designated Fraser River Estuary Hemispheric Shorebird Reserve.⁹³ The reasons given for this recognition are similar to those provided in the legally binding protected areas discussed above: the entire area is a unique and productive ecosystem critical to millions of birds, including migratory species.

Another significant but non-legal recognition of Roberts Bank comes from BirdLife International, the largest nature conservation partnership in the world.⁹⁴ This organization designates Important Bird Areas (IBAs) for the purpose of monitoring and conserving sites that provide vital habitat for significant bird populations.⁹⁵ The Fraser River Estuary IBA (which

⁹² Western Hemisphere Shorebird Reserve Network, "WHSRN: An International strategy for saving shorebirds and their habitats" (2012) Retrieved from:

http://www.whsrn.org/sites/default/files/file/WHSRN_general_fact_sheet_12_06-11.pdf.

⁹³ Western Hemisphere Shorebird Reserve Network, "Fraser River Estuary" (2009) Retrieved from:

<http://www.whsrn.org/site-profile/fraser-river-estuary>.

⁹⁴ "About BirdLife". BirdLife International. Retrieved from: <http://www.birdlife.org/worldwide/partnership/about-birdlife>.

⁹⁵ Important Bird Areas Canada, "BirdLife in Canada" (2009) Retrieved from:

<http://www.ibacanada.com/birdlife.jsp?lang=en>.

includes Roberts Bank) is considered to be one of the most important ecosystems for waterbirds in Canada.⁹⁶ However, this IBA has also been assessed by BirdLife as being in danger due significant environmental threats.⁹⁷ Notably, there are concerns that shipping lanes are contributing to the moderate to rapid deterioration of some areas within the Estuary.⁹⁸

These recognitions are important because they are made by credible and knowledgeable organizations. Due to their lack of legal weight in Canada, they are able to make judgments without being unduly influenced by or resisted due to economic or political concerns. It is arguable that the specific recognition of Roberts Bank by such organizations should weigh in favour of the panel deeming the potential environmental effects for migratory birds in this area as significant.

2.2.5. Conclusion Regarding Significance

When viewed as a whole, it is apparent that Roberts Bank is a critical coastal habitat worthy of conservation, and that migratory birds will likely suffer adverse consequences as a result of further development. The Terminal 2 Project not only runs the risk of breaching several key pieces of federal legislation (though admittedly it would be able to seek authorization through permits in many cases), it also goes against the objectives of the designated areas surrounding it. This should make it clear that the potential adverse environmental effects of the Project are significant not just because an increasingly environmentally aware society wants them to be, but because the sheer magnitude of ecological significance compels it.

2.3. Approval is not Justified in the Circumstances

Although the decision of whether or not SAEs are justified is made following the information-gathering stage of assessment, and by the Governor in Council who has wide discretion to consider factors that the review panel or Minister may not, it is still important to make pre-emptive arguments against justification. This is because these arguments will form part of the panel's report that becomes the record of the assessment for decision-makers. By framing justification issues at the outset, the Governor in Council might be more obliged to give due weight to the assessed effects of the project against other social and economic considerations. Several potential arguments as to why the Terminal 2 Project's environmental effects are not justified in the circumstances are discussed below.

2.3.1. Approval Would be Contrary to the Precautionary Principle

Although some individuals or groups may feel strongly that adverse environmental effects on migratory birds are certain, it would not be surprising if Port Metro Vancouver's experts indicate otherwise by downplaying their predicted severity or likelihood. This may occur for various reasons such as different methods or parameters being used to establish predictions, or

⁹⁶ BirdLife International, *supra* note 4.

⁹⁷ BirdLife International, *supra* note 4.

⁹⁸ BirdLife International, *supra* note 4.

diverging interpretations of data between experts. In such scenarios, or where the conclusive forecasts of environmental effects are simply not possible, it could be argued that approving the project despite the prospect of serious concerns would be contrary to the precautionary principle.

The precautionary principle embodies the notion of “better safe than sorry”. It affirms that “lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation”.⁹⁹ When applied in the context of environmental assessment, Canadian courts have interpreted the principle to mean that projects ought not to be approved simply because potential adverse effects are uncertain and cannot be conclusively proven: “the precautionary principle states that a project should not be undertaken if it *may* have serious adverse environmental consequences, even if it is not possible to prove with any degree of certainty that these consequences will in fact materialise”.¹⁰⁰ The precautionary principle becomes more relevant to a decision where there is greater scientific uncertainty about potential adverse effects.¹⁰¹

The precautionary principle is mentioned twice in *CEAA 2012*'s purpose section. The Act mandates that government actors “must exercise their powers in a manner that...applies the precautionary principle”, and it states as one of its purposes “to ensure that designated projects are...considered in a careful and precautionary manner to avoid significant adverse environmental effects”.¹⁰² Despite this language, however, the Act does not require decision makers or responsible authorities to explicitly apply the precautionary principle when making decisions under the Act. The wording of purpose sections is aspirational and provides guidance, but does not necessarily impose legal duties or requirements.¹⁰³

Nevertheless, the argument can be made that the precautionary principle, as a guiding purpose

⁹⁹ *Pembina Institute for Appropriate Development v. Canada*, 2008 FC 302, at para 31, citing *114957 Canada Lteé (Spraytech, Société d'arrosage) v. Hudson (Town)*, [2001] 2 SCR 241 at para. 31.

¹⁰⁰ *Canadian Parks & Wilderness Society v. Canada (Minister of Canadian Heritage)*, 2003 FCA 197 at para. 24 (emphasis in original).

¹⁰¹ In *Greenspace Alliance v. Ontario (Director, Ministry of the Environment)*, 44 CELR (3d) 216, the Ontario Environmental Review Tribunal said:

The precautionary approach informs the Director about how to proceed when there is uncertainty regarding the scientific conclusions that can be reasonably drawn from the available evidence. Where there is credible evidence that shows that harm is unlikely, the degree of uncertainty is significantly reduced and it is consistent with the precautionary approach for the Director to approve the activity and include measures to prevent harm or to confirm the predictions. On the other hand, where there is a great deal of scientific uncertainty...the Director must presume there will be harm. In that case, a reasonable person having regard for the precautionary approach would refuse the permit. (para. 139)

¹⁰² *CEAA, 2012*, *supra* note 3, s. 4(1)(b) and 4(2).

¹⁰³ In *Sierra Club of Canada v. Ontario (Natural Resources & Transportation)*, 2011 ONSC 4655, Sierra Club argued that the precautionary principle's inclusion in the preamble of Ontario's *Endangered Species Act* meant that it was “an overarching consideration which must direct all aspects of the application for the permit” (at para. 49). The Ontario Superior Court of Justice rejected this argument, holding that “strict compliance with the precautionary principle is not intended to be a pre-condition to the granting of a permit...[it] is a guiding principle not a statutory or regulatory requirement” and “[i]ts presence in the preamble does not make it law. The preamble serves to introduce the ideas and concerns which inform the legislation that follows.” (paras. 53-54).

of *CEAA 2012*, informs the interpretation and application of the Act's other sections. Therefore, decision makers and responsible authorities must pay due consideration to the precautionary principle when making determinations of, for instance, significance of adverse environmental effects or their justification. Conflicting views regarding issues like whether the disruption of biofilm dispersal will decimate the Western Sandpiper population or simply lead these birds to seek out other food sources and feeding areas do not need to stall the environmental assessment. Nor should the fact that disagreement exists among parties regarding the seriousness or likelihood of effects mean that the benefit of the doubt should go to approving Terminal 2. Rather, it can be argued that because *CEAA 2012* compels all of the administrators of environmental assessment to apply the precautionary principle in fulfilling their duties, the fact that significant and potentially irreversible effects are possible should militate against approving the Terminal 2 Project.

2.3.2. The Benefits of the Project do not Outweigh the Costs

The decision of whether or not the significant adverse environmental effects of a project are justified is a discretionary determination made by the Governor in Council.¹⁰⁴ This makes it difficult to anticipate the exact factors that may be considered, however it is possible that a cost-benefit analysis may be used and socio-economic concerns come into play at this late stage in the assessment.¹⁰⁵

The Terminal 2 Project has been proposed for economic reasons. PMV anticipates an increased demand for container shipments over the next several decades and constructing a second terminal would serve to meet this demand and make profit.¹⁰⁶ It may also have social benefits in terms of job creation and benefitting BC citizens generally through economic stimulation.¹⁰⁷ On the other hand, the environmental effects of adding another terminal and nearly doubling vessel traffic to this critical ecosystem cannot be ignored. There are other sources of jobs and ways of stimulating economic growth in BC; the chief benefactor of this project is Port Metro Vancouver, a federal crown corporation. For the millions of birds that rely on Roberts Bank for feeding, roosting and foraging, there are no other options, or only inferior ones, due to widespread habitat loss. This is especially true for the Western Sandpiper as Roberts Bank serves as one of only six stops that the species makes on the way to their breeding grounds in Alaska.¹⁰⁸ This arguably demonstrates that the environmental effects on migratory birds

¹⁰⁴ *CEAA, 2012*, *supra* note 3, s. 52(3) & (4).

¹⁰⁵ CEA Agency Reference Guide, *supra* note 13, at p. 3.

¹⁰⁶ Port Metro Vancouver, "Roberts Bank Terminal 2 Project" (2014) Retrieved from <http://www.robertsbankterminal2.com/about-the-project/roberts-bank-terminal-2-project/>.

¹⁰⁷ Robin Silvester, "Op-ed: Roberts Bank Terminal 2 would increase capacity and generate jobs", *BC Local News* (8 Nov 2012) Retrieved from: <http://www.bclocalnews.com/opinion/177906061.html>.

¹⁰⁸ Roger Emsley, "High Risk of Environmental Degradation on Roberts Bank if Vancouver's Roberts Bank Container Terminal 2 Development Goes Ahead", (2014) Retrieved from: http://www.againstportexpansion.org/uploads/images/file_view/High_Risk_of_Environmental_Degradation_on_Roberts_Bank_April_2014_.pdf.

constitute a severe cost that would not be justified by the moderate socio-economic benefits of the Project. In addition, the offsetting socio-economic benefits of sustaining healthy bird populations --which support tourism, bird-watching, real estate values and economic growth (since many high tech businesses prefer to site their operations in cities with healthy environments) – would also need to be seriously considered.

2.3.3. Approval Would be Contrary to the Purpose of *CEAA 2012*

Despite what some may view as a clear choice using the cost-benefit analysis alluded to above, it is far from certain that the Minister would assign greater weight to environmental costs over socio-economic benefits. To support an argument for greater weight being given to environmental costs, especially those affecting migratory birds, it could be put forward that approving the Terminal 2 Project would be contrary to *CEAA 2012*'s purposes. Specifically, permitting the project to proceed would largely disregard the purposes of:

- Protecting components of the environment within federal jurisdiction from significant adverse environmental effects caused by a designated project;¹⁰⁹
- Ensuring designated projects are considered in a careful and precautionary manner to avoid significant adverse environmental effects;¹¹⁰ and
- Encouraging federal authorities to take actions promoting sustainable development in order to achieve or maintain a healthy environment.¹¹¹

Making these arguments would not guarantee or bind the Governor-in-Council to assign a certain weight to the environmental costs of the Terminal 2 Project, including harm to migratory birds and their habitat. However, it would hopefully serve as a reminder through the panel's report that under *CEAA 2012* environmental factors should not be discounted merely because there is potential for substantial social or economic benefits.

3.0. Summary

In order to prevent the EA approval of the Terminal 2 Project, advocates for Roberts Bank's birds must demonstrate that the environmental effects of the project will be adverse, significant and likely. Scientific evidence will no doubt make up a large part of this assessment in terms of identifying the Project's adverse effects and determining their likelihood. However, persuasive arguments will need to be made that link technical information to the concept of significance, as it is the chief consideration in environmental assessment.

Factors such as the magnitude, geographic extent, duration, frequency and reversibility of environmental effects and the ecological context in which they will take place must be considered; however, a comprehensive method for considering these factors is also necessary. For Roberts Bank, a strong method may be identifying the various legal and non-legal regimes,

¹⁰⁹ *CEAA, 2012, supra* note 3, s 4(1)(a).

¹¹⁰ *CEAA, 2012, supra* note 3, s 4(1)(b).

¹¹¹ *CEAA, 2012, supra* note 3, s 4(1)(h).

designations and objectives concerning migratory birds (such as the IBA program and the Ramsar designation), and examining how the Terminal 2 Project would interact with, affect and measure up to them, including how the project would affect Canada's international obligations, including under the Migratory Bird Convention and the Ramsar Convention.

Submissions discussing why the Terminal 2 Project's effects are not justified in the circumstances could also be put forward to ensure that the review panel's report provides an indication of the appropriate weight that should be assigned to their environmental costs.

Overall, the environmental assessment of the Terminal 2 Project, if completed in a fair and comprehensive manner, could provide Roberts Bank with some of the environmental recognition it deserves but has not yet received in terms of legal protection. Presenting evidence of harm to migratory birds and their habitat, according to the framework discussed above and focusing on the concept of significance, may help ensure that Terminal 2 is assessed in an appropriate manner. Migratory birds must be at the forefront of this process, not just because they are required to be considered under *CEAA 2012*, but because they are an undeniable central feature of Roberts Bank and the Fraser River Estuary as a whole. The environmental value and health of Roberts Bank as a migratory bird habitat has already irrevocably shifted. If it is to endure as a globally recognized ecosystem and essential habitat for these birds, then further development such as Terminal 2 must be rigorously scrutinized with sound, independent science and a sound regard for its international ecological significance.

4.0. Appendix

Birds Protected under the Migratory Birds Convention Act	
Migratory Game Birds	
<ul style="list-style-type: none"> • Anatidae, or waterfowl (ducks, geese and swans) • Gruidae, or cranes (greater and lesser sandhill and whooping cranes) • Rallidae, or rails (coots, gallinules and rails) • Charadriidae, Haematopodidae • Recurvirostridae and Scolopacidae, or shorebirds (including plovers and lapwings, oystercatchers, stilts and avocets, and sandpipers and allies) • Columbidae (doves and wild pigeons) 	
Migratory Insectivorous Birds	
<ul style="list-style-type: none"> • Aegithalidae (long-tailed tits and bushtits) • Alaudidae (larks) • Apodidae (swifts) • Bombycillidae (waxwings) • Caprimulgidae (goatsuckers) • Certhiidae (creepers) • Cinclidae (dippers) • Cuculidae (cuckoos) • Emberizidae (including the emberizid sparrows, wood-warblers, tanagers, cardinals and grosbeaks and allies, bobolinks, meadowlarks, and orioles, but not including blackbirds) • Fringillidae (including the finches and grosbeaks) 	<ul style="list-style-type: none"> • Hirundinidae (swallows) • Laniidae (shrikes) • Mimidae (catbirds, mockingbirds, thrashers, and allies) • Motacillidae (wagtails and pipits) • Muscicapidae (including the kinglets, gnatcatchers, robins, and thrushes) • Paridae (titmice) • Picidae (woodpeckers and allies) • Sittidae (nuthatches) • Trochilidae (hummingbirds) • Troglodytidae (wrens) • Tyrannidae; (tyrant flycatchers) • Vireonidae (vireos)
Other Migratory Nongame Birds	
<ul style="list-style-type: none"> • Alcidae (auks, auklets, guillemots, murre, and puffins) • Ardeidae (bitterns and herons) • Hydrobatidae (storm petrels) • Procellariidae (petrels and shearwaters) • Sulidae (gannets); Podicipedidae (grebes) • Laridae (gulls, jaegers, and terns) • Gaviidae (loons) 	

Figure 1. Article 1 Migratory Birds Protected by the MBCA

Source: Environment Canada (<https://www.ec.gc.ca/nature/default.asp?lang=En&n=496E2702-1# 003>)

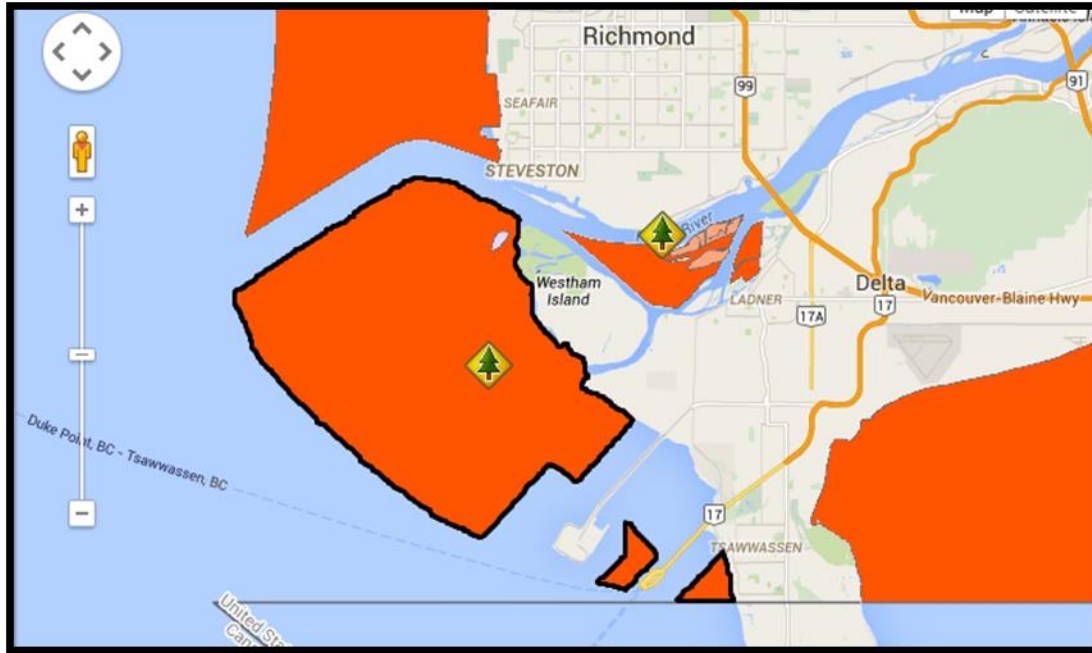


Figure 2. Roberts Bank Wildlife Management Area (area outlined in black)
 Source: BC Ministry of Environment (<http://www.env.gov.bc.ca/fw/habitat/conservation-lands/wma/map.html>)

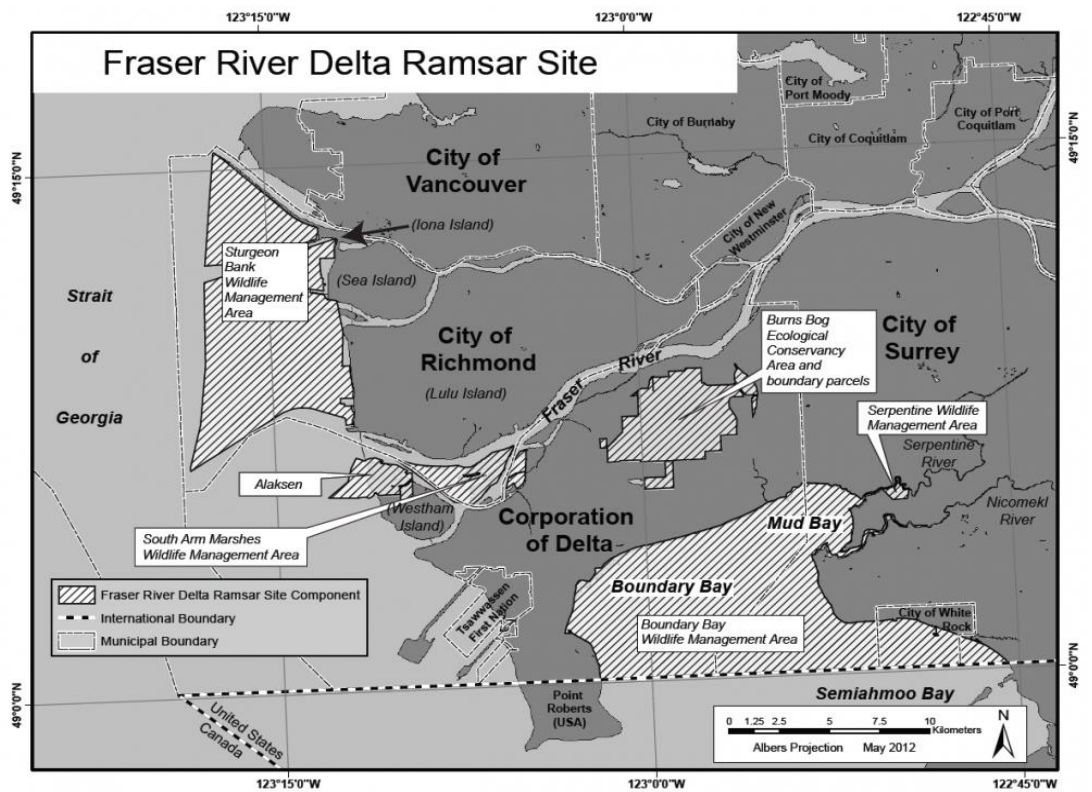


Figure 3. Fraser River Delta Ramsar Site
 Source: Ramsar (<https://rsis.ramsar.org/RISapp/files/RISrep/CA243RIS.pdf>, at p. 24)

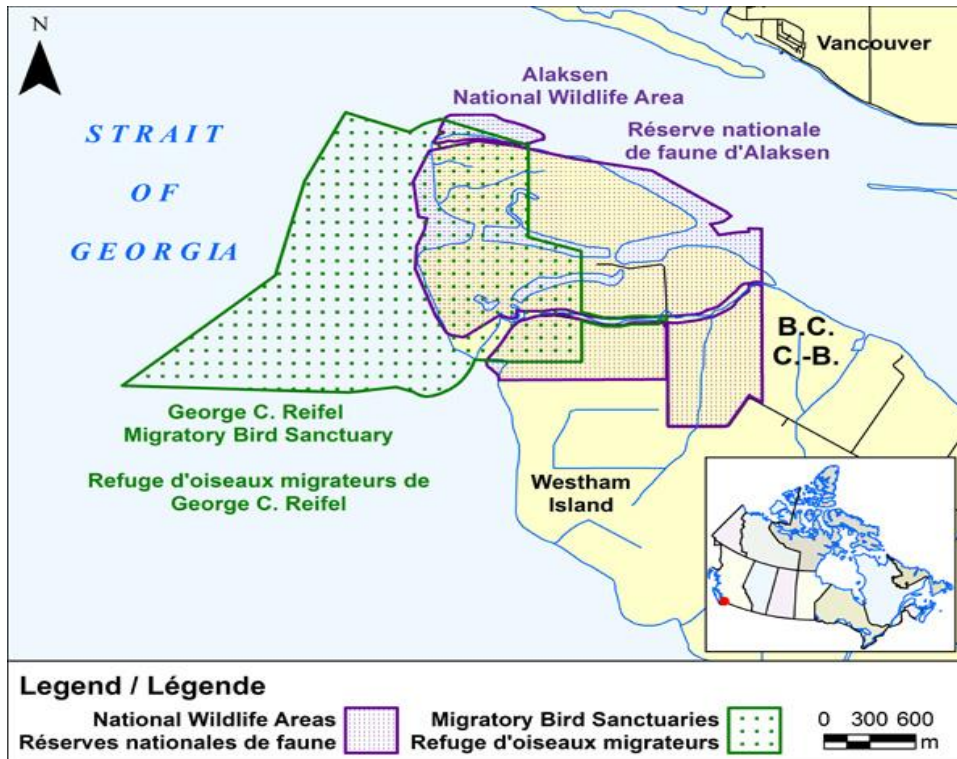


Figure 4. George C. Reifel Migratory Bird Sanctuary & Alaksen Component of the Fraser River Delta Ramsar Site

Source: Environment Canada (<http://www.ec.gc.ca/ap-pa/default.asp?lang=En&n=73907575-1>)

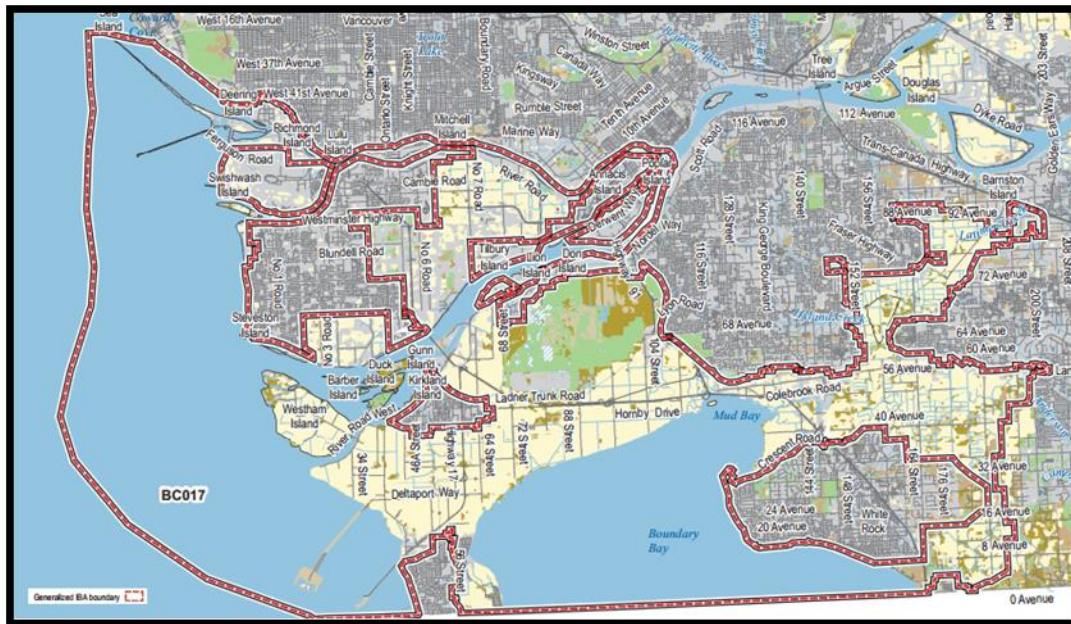


Figure 5. The Fraser River Estuary Important Bird Area

Source: IBA Canada (<http://www.ibacanada.ca/maps/sites/BC017.pdf>)

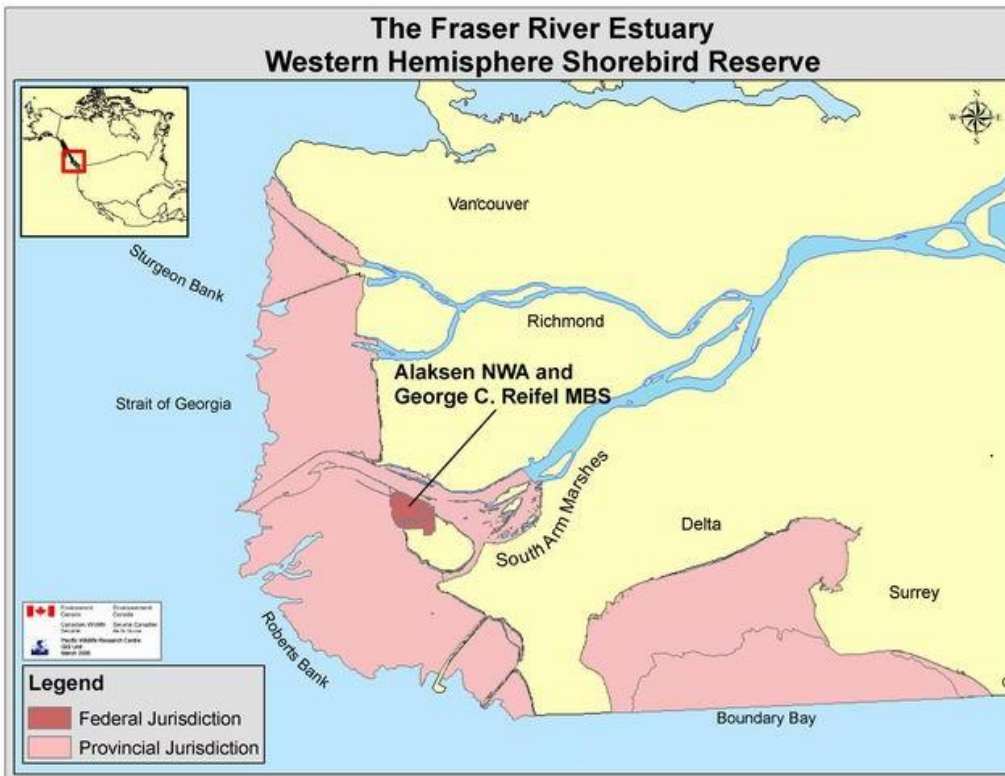


Figure 6. The Fraser River Estuary Western Hemisphere Shorebird Reserve
Source: WHSRN (<http://www.whsrn.org/site-profile/fraser-river-estuary>)