

Port Metro Vancouver (PMV)
Roberts Bank Terminal 2 Project
100 The Ponte, 999 Canada Place
Vancouver, BC V6C 3T4

November 30th, 2012

Dear Ms. Rhona Hunter - Director of Development of RBT2:

RE: Critique of the PMV Proposal to Build Roberts Bank Terminal 2.

Further to your public information program concerning Roberts Bank Terminal 2 (RBT2) and the information meeting I attended on Oct 30th, 2012 I have the following comments to make about the RBT2 proposal and the PMV land use planning (LUP) process.

To the casual reader, some of the below comments may seem a lecture and may at times appear off topic. Some comments will not directly just relate to Roberts Bank and the concerns related to RBT2. In that this project is pushing Roberts Bank to an ecological tipping point, it is not a simple site specific review and a superficial review of adjacent issues that can be used to rationalize development here because of acceptable impacts. My comments should be seen as looking at RBT2 as part of an examination of a new era that is planning to begin a new phase of the industrialization of the Fraser River Estuary. It does have to be reviewed in that context.

Introduction:

Most of the citizens and government biologists that I communicate with have been extremely concerned with how the Roberts Bank original ‘super port’ (referred to as RBT1) has affected the quality of life, property and the fish and wildlife populations and their habitat in the Fraser River and Estuary over the past 44 years. I did some of my first work at the Roberts Bank site with Fisheries Research Board of Canada scientists in 1969 – just after the fill and causeway was put into place. I have been reasonably close to the site and developments since that time.

In the late 1960s when the port was being planned for the export of coal, no real habitat protection legislation was available in Canada. Although habitat legislation was in place to protect fish habitat when the port was expanded, little effective was done to address the overall losses the port had caused since it was built. There has never been any proper review of the real impacts of such a giant fill site and its causeway in the middle of Roberts Bank – a pristine wildlife and fish habitat area until PMV (or its predecessor) largely undermined the hydraulic and ecological functioning of that globally significant estuarine habitat area.

To date the problems have been added to as each decade passes (port expansion and then container expansion in 2012, etc.). Outstanding impacts that can be mitigated (and most cannot be mitigated or compensated for) are still outstanding e.g. aerial power lines that have a significant bird kill in the middle of what should be a wildlife conservation area. Each time one is led to believe that with each new development into the estuary by PMV, the sooner they will address impacts of the past. If that is their strategy, it is indeed a strategy that is misleading the public and the real conservation mitigation needs in the area.

There was always a fear among many citizens living in the area and anyone concerned about wildlife and the fishery that expansion proposal were just a matter of time given a good economic rationale and political opportunity. It appear that time has come for PMV to planning for cargo loads predicted some 40 years away and push the expansion plans when the present government is selectively blind to environmental conservation and is driving forwards a job and prosperity agenda at any cost! This appears to be a window of opportunity for port expansions.

Of probably greatest concern in 2012 is that the Federal government has put PMV in charge of environmental review and therefore to a large degree environmental protection. Environmental review is now most often in the hands of those that are the industrial developers of the estuary i.e. we have put the wolf in charge of the sheep. Some say that is an extreme conflict of interest but a minority say that is legal in that this conflict of interest is approved by government regulations. That alone should inform Canadians and those concerted about the world class Fraser River and its estuary what are the government priorities in this era.

Further to this, PMV has been blessed by the appointment of a CEO that seems to not care about farmland and associated natural environment - a subject sacred to most in BC. Farmland and even the estuary is again seen as an industrial land bank. PMV plans are to now take advantage of that narrow development point of view and government deregulation and resource cuts to environmental agencies will allow a minimization of what used to be significant environmental concerns.

Future generations will suffer as this cumulative environment debt is passed onto the next generations. Will our grand children know what we had in 1960 or in 2012 by 2030? The societal memory is very short in terms of what we had and the present level of living resources continues to be represented by a moving baseline that we are fooled into believing is all that we have to maintain.

The original Roberts Bank port and expansions have been the greatest environmental impacts to the Fraser Estuary since some of the original dyke alignments and jetties were put in place many decades ago. Looking at the review process PMV has initiated, one can only question why in 2012 would anyone be proposing to double the port facility and expect many of use to live under the illusion that the impact will be minimal or be compensated for and its just a matter of going through the EA process and the permits will fall into place. The callous disregard for environmental sustainability by PMV and

the governments is astonishing and above all immoral as related to our living resources that we must make a final stand to protect before it is too late. Here we are not looking at something that can be mitigated or compensated for – it's a matter of certain and massive habitat permanent destruction and no consultations, environmental review or stacks of consultant studies will make it acceptable.. Sugar coatings on this project will not work!

The remaining parts of Fraser River estuary cannot continue to be seen as an industrial land bank or a bologna sausage where you cut off slices until our children are left with nothing more than the sausage string!

Pre Environmental Review Consultations.

The approach DPW has taken is not that different other project proponents that have to secure some form of approval. It appears we have a rigid consultation process that can channel discussions so as the very basis of RBT2 doesn't come under great scrutiny. On Page 20 of the Categories for Environmental Study - the first thing that should see are project 'alternatives' to avoid or reduce environmental impacts.. Nowhere is this investigated or is it planned for investigation and that alone channels the thinking and conflict process.

Is the PMV more concerned about marine traffic and the import and export of goods or about their apparent need to rationalize an ever growing port as part of their perceived empire? Has PMV actually sat down with Prince Rupert Port and compared plans over the next 30 years for container cargo? Are there no better container options at Surrey Fraser or Richmond Fraser dock? Is there no alternative to expansion at RBT2? Can PMV not advance a higher speed transfer of containers off Roberts Bank T1 and the use of the land base for the storage of containers and rail and truck transfers?

It seems very odd and indeed very retrogressive to fill in key ocean habitat for simply a glorified parking lot for containers and an in the ocean railway and truck yard? Why can an option of high speed transfer of containers from the existing facility not replace a doubling of the facility at great cost to the environment?

The series of meetings that PMV held in October 2012 to discuss this project were called "Community stakeholder and public consultation". What does that mean? It appeared to be more of an introductory meeting to RBT2 and at the most an information meeting and not a real form of consultation. There is no known real consultation mechanism in place.

Also, if this was early and pre-environmental review consultation, why has PMV apparently consulted with some parties ahead of this series of meetings to determine what the configuration of RBT2 should be i.e. extended out into the Gulf of Georgia past the existing port area? When we inquired about it, PMV officials noted that this was done after initial consultations so as to avoid impacts on habitat. Who suggested that – EC, DFO, your own consultants, etc?

At your consultation meeting in Richmond on October 30th, a number of documents were asked for including the case PMV had made concerning the logic and realistic levels of jobs you have projected for use in the case for selling your project? I also clearly asked for the agreement PMV had with DFO on habitat banking in that I noted on page 17 of your consultation document. I was led to believe that PMV was creating a habitat bank to offset future habitat losses. One way to build habitat credits for the bank was to simply clear logs off of other inter-tidal marsh areas. I clearly noted that this was not acceptable as habitat creation and to use such credits are invalid and cannot be used to off set real habitat destruction as planned by PMV.

Also such credits creation as shown in your consultation document was off site and it's unlike for unlike - a very undesirable and non-scientific approach of creating compensation habitat.. I was the biologist who designed the original agreement with the North Fraser Harbour Commission back in 1986 and what is now being done is a corruption of that intent and approach.

Although the consultation comment window is closed today, I still do look forward to receiving the DFO-PMV habitat banking, compensation and clean-up agreement that you promised me at our meeting. Not forwarding such requested material is again a good way to undermine you ability to conduct meaningful public information or consultations. When the public ask for material and you promise to forward it and do not deliver it can lead one to believe that this may be a charade and it is being used for PMV to map out the route of least resistance to get this proposal in front of the best EA review process for an approval.

The PMV and Environmental Review Process:

Despite your so called early consultations it appears that a decision has not been made on the final environmental review process. However, PMV indicted that it should be a CEEA Panel Review and /or a BC EAO review or joint review process. Why was our view on that not a key part of pre-environmental review consultations?

In that the Canadian Environmental Assessment Act (CEEA) review process has been so watered down by Bill C 38 (June 29, 2012) and now CEEA possible reviews can now conduct a review to see if a review is necessary. Also involving the BC EAO creates absolutely no comfort with almost anyone that has been exposed to the BC process. The BC EAO process is looked upon as a near joke by many and the BC Auditor General (2011) and the University of Victoria Law School (2010) has roundly criticized the BC EAO as an ineffective body and process if its goal is to address environmental impacts.

In an Oct 2012 Environmental Managers Conference in Vancouver, BC EAO gave a presentation and noted past weaknesses but noted that the BC EAO had patched up those weaknesses including the hiring of enforcement officers. Despite that the BC EAO was again been made to look inept as the Gateway Ring Road from Roberts Bank allowed the contractors to dump fill on environmentally sensitive areas that were to be protected. It

took BC EAO enforcement officer months to document what had been done and the Environmental Certificate (approval) was just amended to make the violations a legal approval i.e. achieve retro-active compliance. The vegetation that was destroyed by the illegal fill had to now be re-planted elsewhere. That is akin to asking the bank robber to give a donation to the bank he just robbed and his robbery is now legal.

Lack of Rationale for Further Destruction of Roberts Bank

Only small remnant parts of the Fraser Estuary exists after 140 years of unrelenting anthropogenic pressure on that globally significant aquatic ecosystem that supports some of the worlds largest populations of wildlife and fishery populations - including several species of salmon and approximately 70 other fish species.

The Estuary and lower river has gone through several severe land use and industrial altering events that has greatly harmed its present viability and future survival. The development industrial ages on the delta have included:

1. 1860s to 1930s --original dyking and draining of wetlands. During this era at least 80% of Fraser River estuary wetlands have been lost.
2. 1948- 1960s era. Dyke final alignments put into place and massive fill, dredging began in the estuary e.g. Roberta Bank, Tilbury Slough, Iona, Dinsmore, Twigg, etc. Roberts Bank fill was largest single loss in estuary since initial dyking was put into place some 80-100 years earlier.
3. 1970 to 1980 era.- ongoing growth and constant development of docks and industry along shorelines (e.g. Tilbury Slough, Annacis Island and adjacent marshes lost) and great increase of industrial and domestic effluent discharges into the river.
4. 1980-2010 – despite ongoing development, some gains made in effluent treatment, phasing out of dirty industries (eg. pole treating plants) and harbour management plans put in place along with habitat protection policies. Despite that, great setbacks have still occurred such as the filling in of additional mud flats at the Tsawwassen BC Ferry Terminal as a parking and shopping centre lot on Roberts Bank.
5. 2010 and the future – bold plans for a new generation of development plans on estuary habitats i.e.; expanded container terminal at Roberts Bank, doubling of Roberts Bank port (RBT 2), airport expansion for 2040, jet fuel tankers and fuel facilities in the river, coal port at Surrey –Fraser Dock, etc.). The neutering of environmental review and habitat protection laws and the massive cuts to BC MOE and DFO habitat protection staff has and will greatly hamper protection of the remaining and last key habitat and resources in the Fraser Estuary. Developers may find this a good time to now push their dream ‘grow the economy’ projects.

Developments to date on Roberts Bank has done tremendous damage to the Fraser River Estuary. That includes its habitats, blockage of fish and wildlife migration, blockage of water currents and sediment transport and on going spills and discharges into the estuary. Despite expansion of facilities at Roberts Bank over the years, no real attempt has been made to restore lost habitat areas or compensate for the loss of habitats other than largely ineffective and token measures.

To continue to cut off vital pieces of the small remaining parts of the marshes and mudflats and sub tidal habitat areas is rather unfathomable in 2012 considering 150 years of losses and degradation in the estuary. Often when a development is proposed for yet another piece of the estuary and they run into public opposition, the developer most often says, 'do the fish and ducks and the environmentalist have to have everything'? The simple answer is – 'yes' - the fish and wildlife should have all of what is remaining in that 80% of most key habitats have been destroyed or irreversibly degraded. Constant new development cannot be at the expense of the few remaining 'pristine' habitat areas.

If anyone including PMV and governments are serious about any form of environmental sustainability, how can any further losses of the estuary be tolerated let alone on the most compromised delta frontage area i.e. Roberts Bank.

Any further expansion at this time is simply putting in a entirely new batch of nails into the coffin of salmon and wildlife and the social and food benefits humans derive from those natural wonders that greatly enhances their quality of life in an urban environment and helps define what it is to be from British Columbia.

Environmental Impacts of the Past RBT1 and the Proposed RBT2.

In summary the present Roberts Bank port facilities and infrastructure has caused the following environmental impacts and concerns.

- Causeway blockage / interference of natural marine and Fraser river plume water movements
- Causeway blockage/ interference of natural sediment movements
- Causeway blockage/interference of fish movements and massive salmon migrations.
- Causeway alteration of water quality so as to interfere with the natural freshwater – saltwater estuary mixing and salinity regimes.
- Creation of unnatural habitat and resulting in growth of exotic biota in the inter-causeway area.
- Loss of the Roberts Bank marsh platform due to loss of sediment replenishment
- Direct loss of the sub-tidal habitat in a large area and the key water column living space in the estuary. At no time was this compensated for in any manner. Compensation for such a loss is indeed near impossible.

- Dredging of adjacent mudflat areas for fill and then subsequent erosion has greatly degraded the mudflat environment to double that of the fill areas. Shallow water habitat has indeed been converted into deep water habitat –unnatural in that area and generally of less overall productivity in that part of the estuary.
- To greatly complicate any mitigation techniques, hard stable structures were located off the fill area in deep water to allow for colonization by fish in a poorly thought out compensation scheme. These compensation structures indeed attract predators into the estuary that may well prey upon young salmon.
- No effort made to address water movement through the causeway as part of RBT1 development and then widened in later years. No plans in place to address that very same issue despite much more science and above all much more ongoing development at the site.
- The killing of birds by overhead power lines. Simple solutions are available to address that but not acted on by PMV.
- Great pressure and alienation of port development on and adjacent to some of Canada's best farmland. This threat to the farmland will now be manifested as development spreads across the farmland for transportation etc needs.
- Great impact to the backup lands as used by migrating and resident birds that are of international significance.
- Spill and coal dust problems on private property and in fish habitats.
- Light and noise problems affect quality of life and property values up to 10 km away. Ongoing noise 24 hours a day destroys solitude at even Point Roberts Marine Park.
- Tremendous truck traffic on local roads much of which will not be alleviated by the Gateway Ring Road Project e.g. traffic into and out of Richmond via the Massey Tunnel.
- Most of the Fraser River Estuary and the Roberts Bank part is committed to and designated as part of the Fraser River Delta Ramsar Site, a Wildlife Management Area and a National Wildlife Refuge – Alaskan National Wildlife Refuge. The high wildlife and fishery values of this area are totally incompatible with any expansion of any causeways or fill or industrial activity in this area.
- As we attempt to revive whale populations, the killer whales that have always used this area continue to be harassed. Marine traffic inherent with noise, lights and spills will only create greater pressure on these animals that are now threatened or endangered.
- The RB Port complex and associated infrastructure has resulted in the loss and total destruction of a great deal of the best farmland and wildlife habitat in Canada.
- The further expansion of Roberts Bank port facility will probably cumulatively add to or exacerbate most if not all of the above environmental setbacks which are undermining the very survival of the Fraser Estuary as a habitat area of international significance for fish, especially salmon, and migratory bird populations.
- No comprehensive cumulative impact review of all works in the estuary to determine where is the balance point in terms of development / conservation and when will we reach the tipping point and eventual overall ecological collapse in

the estuary. Such a study would take years to do and is beyond the grasp and capability of PMV, MOE, EC and DFO to do.

PMV Land Use Planning.

I purposefully did not go to the PMV LUP consultation meetings in that I don't believe PMV has a real useful policy or practice that is in the public interest that can be called overall land use planning. In fact what PMV often does is in conflict with broader municipal and regional land use planning. The policy of PMV is that of a senior government i.e. they can ignore the concerns and powers of the citizen and the local planning authority's i.e. local governments. In addition, the policy of PMV does not involve consultation but at time it more appears to be land grabs as they have done in east Richmond and have and are doing in Tsawassassen – Roberts Bank areas.

The stated position of the CEO of PMV has undermined credible LUP planning approach. The arrogance of the PMV CEO Mr. Silvester has not shown that he or the PMV will be fair in his thinking about any form of local land use planning.

However if you must have some advice / input on land use planning I strongly recommend:

1. Do not expand port interests directly or indirectly by exploiting some of the best farm and in the world i.e. key farming lands in the Lower Fraser Valley and especially in the Fraser River Estuary.
2. Do not fill in even much more productive food producing land (the most productive in the world) by filling in intertidal and sub-tidal habitats in the Fraser River Estuary. This are very unique and extremely highly productive lands that are needed to allow ecosystem functioning and are the basis of the best protein producing system on Earth. Why would PMV now again fill in that key and essential habitat area for yet a contained unloading –loading and storage parking lot? Society and PMV have simply got to put some common sense and look at science before again promoting what are reckless land use practices.

A short essay was written on the comments of PMV CEO's comments on the value of farmlands and by association natural habitats in 2011. At the container meetings the PMV staff noted that Mr. R. Silvester's comments were taken out of context – a convenient attempt to cover your CEO's callous attitudes to our small amount of highly productive farm lands. In that my comments on this matter and the value of farmland to British Columbians is as relevant, it is attached to be a formal part of this submission (attached).

The Economic Case for Port Expansion:

This issue of port economics was superficially presented at the Oct 30th public consultation meeting. As usual the issue of more jobs is promoted as a major benefit. Little was said about the constant cry of a lack of skilled labour!

As promised, PMV did not provide any follow-up information that was asked for as related to economic benefits including the job creation claims at the Oct 30th, 2012 Richmond meeting. Some felt the job creation claims were exaggerated and PMV was to mail out an update on that issue. The RBT2 was presented as a fully automated modern container port but was to somehow create thousands of jobs!

The apparent thinking of the leadership and planners at PMV seems similar to that we now see at YVR. We appear to be in a phase where we are now madly planning for continuous growth up to at least 2040 or even 2072 - VAFFC fuel transport and terminal projected needs in the Fraser River. This is despite the fact that we have no clue where international trade will be at in 20-30 years from now or even what will be our fossil fuel needs and limitations by 2040 let alone 2072! In that a government is in place in Victoria (ie. Liberal government of Christy Clark) and in Ottawa (Conservative government of Stephen Harper) they continue to promote a jobs and a prosperity agenda at any cost, those in charge of key facilities such as the airport and port see this as their window of opportunity to madly expand their facilities before conditions or environmental rules question that never ending growth mantra.

Further to the above, YVR is doing everything to attract more airlines to YVR and out compete SeaTac and even Calgary as a west coast hub airport. Where is the logic in that when it comes to the real basic needs of this part of the world? At times it seems little more than just another form of self serving empire building! PMV is no different. To date they have done everything to attract container cargo from Seattle and the Americans have even threatened to levy a surcharge to US bound containers that come to the PMV area vs. their own ports.

Does this competition make any real sense when it comes to what we need to have as basic services in a livable and sustainable area in this part of the world vs. a maximum throughput airport or port growth model? Must we have a near monopoly or the biggest empire to be efficient and prosperous? . At what point does excessive growth negatively impact our region and we lose quality of life and other benchmarks that are indicative of a successful and truly prosperous society? Does this competition to be bigger make any economic, social or environmental sense?

Further to this, there is now a proposal in place to put a coal port into the Surrey - Fraser docks near New Westminster. This is to export coal from the USA to Surrey and then barge it to Texada Island, unload it and store it and then load it on ocean going ships for export to Asia. Considering the double handling of the coal, transport north into Canada, is this not port expansion for the sake of port expansion i.e. it doesn't serve any of our trade needs but puts us in the position of being a conveyor belt for the US and Asia!

Do we just do that for jobs when we constantly say we do not have enough skilled workers? Such practices as the double handling of coal just to monopolize that business is bound to add greatly to our carbon footprint. This is the ultimate environmental issue and it is always swept under the carpet and conveniently forgotten. What is the long term economic and ecological case for doing this?

To add some common sense to the 'grow the economy' mantra of business, the port, Victoria and Ottawa one must address the economics of global warming and how does that relate to this port madness and to the fossil fuel gold rush mentality that we now see taking place. It is time for some of these mega projects to quit externalizing the great cost to the environment. Much of that cost will never be repaid other than by the suffering of our natural heritage, overall ecosystem that supports life and the economy and future generations of life on this planet. RBT2 has to be put into this discussion and context.

If these are initial consultations, the material PMV has provided to make a strong economic case for Robert Bank Port expansion is not convincing. It is based on the belief that Asia etc. can and will keep growing at a break neck speed well into the next several decades. The best case growth for the sake of growth projections are difficult to believe and should not be achievable unless this planet has nest to no limits to growth despite all the signs around us that indicate otherwise. The bigger ecological picture and common sense has to prevail.

Where to Next?

At the earlier container consultations at RBT1 I noted that PMV was in a conflict of interest i.e. looking after environmental concerns and assessments yet being in charge of approvals that will result in financial gain – a classic conflict of interest. Some say that is a legal because the government has legislated that conflict of interest as an acceptable way of doing business. That does not make it acceptable from a common sense or ethical point of view. What is happening in federal harbours of Canada in terms of environmental assessments and approvals is a travesty of justice. Now, PMV is the witness, prosecutor, judge and jury in these matters.

At the Richmond meeting (Oct 30th) the issue of a proper and neutral environmental assessment was raised. This means no conflict of interest, open to the public, fully transparent and above all fair and just i.e. unlike the harmonized review presently being conducted by BC EAO and PMV on the VAFFC jet fuel tanker proposal for the Fraser River just north of Roberts Bank. At the above meeting the PMV official noted that the review of RBT2 would have to be either a CEAA or BC EAO panel type review or a joint review by the two agencies.

If PMV is at all concerned about environmental sustainability and undoing their past mistakes it is truly unfortunate that they would even consider a BC EMO project review. The BC EAO reviews and implementation of those reviews has been to some significant degree a product of ridicule by many.

For instance, in 2011 the BC AG was very critical of the BC EAO implementation of their environmental approvals. Despite that and their attempts to patch up significant shortcomings, they again messed up the Gateway Ring Road which is really part of this Roberts Bank port expansion's ultimate development plan. Unfortunately each part of Roberts Bank and its overall infrastructure needs have been handled in a piecemeal manner and that is anti-ecosystem and anti-cumulative impact in approach. The BC EAO has no good record of responsible and proactive environmental review and protection and cannot be considered an option for looking at the RBT2 part of this port expansion plan.

As final proof of this, a terrible precedent was set in 2010 when PMV and BC EAO began a harmonized review of the VAFFC Jet Fuel Project in Richmond. The area and jurisdictions involved is at least 80% federal mandate but that is now subjected to a junior government review. PMV has indicated that they do not respect certain aspects of this joint review i.e. shipping issues and safety in their harbour is their sole jurisdiction. Finally, as mentioned above, PMV is in an obvious conflict of interest in that project – they will profit by any approval. Procedural fairness, transparency and public trust in a proper EA is essential?

I would strongly oppose any further thoughts of destroying more of Roberts Bank. However if PMV is to disregard any concern for the protection of the remaining part of the Fraser Estuary, a mandatory full CEAA Panel must be held and all studies conducted to rationalize this project or impact or lack of impact must be fully transparent and have ongoing public input. The PMV-BC EAO process reviewing the Jet Fuel Project has been closed, biased, in a conflict of interest and the public has been obstructed from having input into studies and even seeing the studies and then being prevented from commenting on them. Unfortunately this may be the environmental assessment approach of the day as practiced by PMV, BC EAO, the new CEAA and the federal and BC government agencies. The public and future generations deserve much better.

Conclusions - Recommendations:

1. The further development of the Roberts Bank port complex as outlined in RBT2 plan is environmentally non-sustainable and should be abandoned for better alternatives. Where and what are the alternatives?
2. In that what PMV is proposing, a massive new development of port capability on and adjacent to Roberts Bank and in the Fraser River, a coastal wide port study is necessary to determine how future Canadian needs can be addressed. This was done decades ago and it is time to dust off some old approaches in that they seemed more enlightened than the so called new modernized planning, environmental review and protection we now see taking place.
3. Many of the past highly significant and destructive environmental impacts at RBT1 has never been mitigated or properly compensated for. A promise to

address those impacts as part of an approval to create new impacts is simply not credible.

4. The plan to clean up logs on marshes (a temporary measure) or install hard structures in a mudflat environment as compensation for the permanent destruction of naturally created and critical habitat is totally misdirected and not scientifically defensible. PMV promise to forward documents on such an approach to compensation (i.e. marsh clean-up) has not been received.
5. In that many of the public have extremely limited resources to respond to a giant project of this type, resources have to be made available to even the playing field and protect the public interest. In the past the public interest has to some large degree been represented by the government agencies like DFO but this is not longer possible due to their cuts in staff, diminished will to do their job and the neutering of their conservation and environmental impact legislative mandates.
6. If this environmentally destructive project is to be forwarded for a formal environmental assessment, a full fledged public panel environmental hearing must be directed by the Federal government and its terms of reference must to made available for public review.
7. A full and proper environmental assessment must specify the studies needed and review the cumulative environmental impacts of all past and presently envisioned development in the Fraser Estuary from the Port Mann Bridge into the Salish Sea. This study must examine what are the needs for a viable and fully functioning estuary so as to protect the living resources and water quality we now have and look into where development and habitat alteration has been excessive and should not be permitted and where it has to be reversed.
8. This project (i.e. RBT2) cannot be treated as just another project proposed for construction in the Fraser River Estuary. To put this proposal into its proper context relating to the long term survival of this aquatic ecosystem area, significant studies and reviews, of the type we have not seen before, must be undertaken.
9. In that we are at a time of reduced resources to steward our environment, have a greatly reduced will, fewer agency staff / scientists and neutered legislation, it is incomprehensible how a proper and defendable scientific environmental impact review can be done at this time. PMV and their consultants and indeed some of the environmental protection agencies probably cannot even comprehend the magnitude of a proper cumulative impact review taking into account a full and proper ecosystem approach. Considering a precautionary approach, this has to examine where we are now at and what are the maximum allowable impacts and needed protection in the Fraser River Estuary ecosystem.

10. Before RBT2 is further considered, now is the time for PMV to address the past impacts of RBT1. Openings should be put into the causeway. Why are the power lines not under ground? Can noise and light issues be addressed? How do you really compensate for the loss of dozens of hectares of permanent habitat destruction? If PMV will not or can not address past impacts, how are they going to address very similar future impacts of RBT2?

Sincerely yours

A handwritten signature in black ink, appearing to read "O. Langer". The signature is fluid and cursive, with the first letter of the first name being a large, stylized 'O'.

Otto E. Langer MSc
Fisheries Biologist / Aquatic Ecologist.

Addendum

November 8, 2011

An article in BC Business online (2011-10-06 by ibowerbank) features Robin Silvester, the CEO of Port Metro Vancouver. Mr. Silvester comes from England via Australia and seems intent on industrializing the Lower Fraser Valley in that his background is related to what he calls "capital intensive, asset and service focused large corporate customers". Based on his many quotes in the article those that live in the Lower Fraser Valley and especially Delta should be alarmed by his less than caring attitude and respect for farming and food production in the Lower Mainland.

In the article Mr. Silvester is quoted as saying

"It's critically important that the Regional Growth Strategy and the municipalities recognize industrial land must be preserved. Otherwise, the economy will, over time, wither," Silvester says. "Agriculture is emotionally important, but economically [of] relatively low importance to the Lower Mainland. And in terms of food security, [it] is almost meaningless for the Lower Mainland."

One can immediately get a cold feeling in that this is the mentality that we used to see in the 1950-early 1970s when we demonstrated a near total ignorance of the need to protect our environment and our food producing farmland. While in the path of great population and industrial expansion we lost many opportunities to protect and conserve key agricultural and conservation areas of the Lower Mainland. What is remaining is of special importance.

The statements of Mr. Silvester indicate insensitivity and a poor comprehension of the value of local food production. The Fraser Valley surpasses even the Netherlands in its intensive agriculture and the Lower Fraser Valley which covers less than two percent of BC accounts for about two thirds of BC's total farm gate receipts. In 2006 that was \$1.65 billion of food production. Silvester says that is of low economic importance and is almost meaningless. This is less than an informed opinion.

BC does produce 50% of its food and that is despite the fact that BC is full of mountains and good agricultural land is only about 5% of our total land base. The food produced in the Lower Fraser Valley is a key part of that production that feeds BC. In BC we are self sufficient in milk, cream, chicken, turkey, meat and eggs and most of that is produced in the Lower Fraser Valley. We produce one quarter of the world's supply of blueberries and we are the biggest producer of raspberries in North America. We also produce three times the cranberries that we eat in BC. Most green house vegetables (cucumbers, and tomatoes) that we eat are produced locally and much is exported out of the province.

Port Metro Vancouver has recently bought a large chunk of excellent farmland in Richmond and plans to promote expansion into the backup agriculture lands at Roberts Bank which is now Tsawwassen Indian Band lands. Our food production is truly a miracle considering that BC's vast land base is only 5% farmland. It is disappointing to see that Port Metro Vancouver's new executive is doing his best to undermine one of our basic human rights – the right and the ability to grow our own food to feed ourselves.

I really do not see much improvement in the next few years as we slip down the slippery slope of the Harper government's weakened environmental protection policies. To make matters worse, the Federal government has delegated the Canadian Environmental Assessment Act so those running the port can evaluate their own environmental and social impacts ie the wolf is now in charge of the sheep. This conflict of interest is a grave concern.

The degree of environmental and farmland protection seemed much more promising in the 1980s than it now does and the Federal and BC governments are simply not addressing the needs for our future generations to feed themselves. Such attitudes will allow the port to destroy some of our best farmlands and destroy key fish and wildlife habitat areas in the Fraser River Estuary. The future does not look good. The gains we made in the mid 1970s to late 1990s to protect our fishery, agriculture lands and our general environment is rapidly slipping away as we push industrial development and associated infrastructure at almost any cost.

We seem to never learn.

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