

DIRECTLY AFFECTED

TABLE 1 -

Issue 7: The potential environmental and socio-economic effects of the proposed project.

and/or

Issue 12: Potential impacts of the Project on directly affected landowners and their land use.

Kinder Morgan has proposed to Langley counsel a new route for their pipeline that would run along the side of the Redwoods golf course property line. My concern is this would be behind my extremely small lot, it could cause landscaping issues, loss of yard and decreased property values and uncertain long term affects.

I am a [First Nation's] landowner who will be directly affected by the Kinder Morgan Trans Mountain Expansion Project. As described below, I own two parcels of land that will be directly impacted by the proposed pipeline expansion.

- The existing TMPL pipeline system [C.L.S.R. M 3630] runs through my property (Lot 57-4) located within the Coldwater Indian Band Indian Reserve #1
- . Twinning of the existing pipeline will mean taking up more of my land.
- The proposed corridor expansion will likely require the taking of new right of way and the expansion of the existing pipeline, both of these developments will have a direct impact on my land, water and resources and the resulting environmental impacts will limit the use of these lands for agricultural purposes and other developments.
- The second property that I own is Lot 103 where my house is located. I am concerned about the negative impacts in relation to the pipeline's proximity to my house and including but not limited to the potential of drinking water contamination; air quality (e.g, dust) and noise disturbance during the pre-construction and construction phases and the devaluation of my property. I am also concerned about the reclamation measures to return the disturbed land to a stable and maintenance free condition.
- The negative effects of the existing pipeline running through my property is such that I am not able to drink the water and also because of the high iron content my appliances and laundry are discoloured. As a result, Trans Mountain provides bottled water and I have to go elsewhere to do my laundry. As a result of the existing pipeline, a new well was created, however, water softener is required and the filter has to be changed every 3 or 4 days.
- As an affected landowner, through my participation in the hearing, I can provide the NEB with information about the direct impacts that the proposed Project will have on my parcels of land.
- I am concerned about the risk of accidents or malfunctions of the pipeline such as a spill, leak or discharge occurring on or near my lands. I have a direct interest in the proposed contingency plans for spills, accidents or malfunctions as it relates to the pipeline crossing my lands.
- By participating in the hearing, I may also make recommendations about avoidance and mitigation measures in relation to the issues outlined above. I may also make recommendations on any terms and conditions that should be included in the event that the Board recommends approval of the Project.
- In regards to the consultation with individual landowners, to date I have not received any direct communications from Kinder Morgan's representatives with respect to the Project, obtaining consent to access to my property or developing a mutually agreeable arrangement for addressing impacts.

I am a resident of North Burnaby and will be directly affected by the proposed pipeline construction project. Not only am I living on the proposed pipeline route along Lougheed Highway; my place of residence is also located between 2 spill ways. If there was an oil leak in

my residential area my building may be completely cut off from the rest of Burnaby by the spill.

The construction in Burnaby will directly affect my commute time through Burnaby every day. A spill North Burnaby would also drastically increase my commute time or make it impossible all together.

Construction would take place directly beside my place of residence and I will be negatively affected from increased noise and air pollution from construction.

The construction and operation of the pipeline will greatly reduce the value of my property due to the risks associated with it. My properties value would also be dramatically reduced if there were to be an oil spill in my residential area or even North Burnaby.

There is a row of trees on our property that reduces traffic noise from Lougheed Hwy that may be cut down due to construction. This removal of trees will increase traffic noise, be unsightly, and reduce my properties value.

In the coming years our strata will be redoing our apartment buildings underground parking membrane. This major renovation project will require the use of heavy machinery such as backhoes, trucks, etc. The presence of the pipeline may cause delays and create extra expenses which will be incurred by me and the other residents of my building. If the risk of accidental pipeline rupture due to the presence of the heavy machinery on site is too high we may not even be allowed to perform this vital renovation, further decreasing my property value.

I am concerned by the excessive size of the 150 m right of way that Kinder Morgan has applied for. The entire building I live in and the land associated with it is located within this 150 m right of way. This would give Kinder Morgan staff the right to enter and alter our property as they see fit. In doing so they may not have the best interests of me and my fellow residents in mind and decrease my property value.

I frequently use the Burnaby Lake Park near my home. If there was an oil spill in the area that entered the park I would no longer be able to use the park during clean up, and it would greatly degrade the natural beauty and value of the park.

I have not been contacted or informed in any way by Kinder Morgan or the National Energy Board about this proposed pipeline project.

This project will go through right through **our farm land** impacting our farm income and possibly causing future impairment of our land value due to spills etc.

When the company did maintenance work on the pipeline in the mid 90's they were difficult to work with. We were not able to negotiate compensation without the help of a lawyer, at our own expense.

My concern revolves around being fairly compensated for loss of income during the time the project is working on our land and for the subsequent years when the land is recovering from the work. My second concern is compensation in the event of an oil spill, an oil spill would severely decrease our land value and I would like the company to acinformation this and have a fair compensation plan in place prior to any accidents so that as landowners we are not bearing any financial risk due to a disaster.

Having worked with this company in the past I know that negotiating compensation is difficult and stressful. I would like to see the company have fair and equitable compensation and safety arrangements in place before any work is started on the project.

The Gulf Islands and the Salish Sea are considered at high risk for an oil spill. I am a waterfront landowner in the Gulf Islands, specifically on Thetis Island, and an oil spill will affect the economic value of my property, as well as my use and enjoyment of my property. Many birds and marine mammals frequent the marine waters in front of and near my house daily year round, including bufflehead, goldeneye, gulls, great blue heron (a species at risk), kingfisher, mergansers, bald eagle, scoter, marbled murrelet (a species at risk), cormorants, harbour seal, river otter. Marine birds and mammals are very sensitive to oil spills. I kayak daily in the Gulf Islands, and an oil spill will negatively impact this recreational activity, including bird watching and whale watching. I sail throughout the Gulf Islands for 14 to 21 days in the summer months each year and an oil spill will adversely impact this recreational activity. I am a biologist and a writer and I have been writing about the southern resident killer whales for seven years.

Southern resident killer whales are an endangered species in Canada and the proposed tanker route travels through their critical habitat. An oil spill will adversely impact this population of endangered whales. Major threats to the southern resident killer whales include toxic contamination from pollutants and acoustic interference from marine traffic; the proposed marine shipping route for tankers from the project will increase both of these threats.

False Creek Watershed Society - a representative stakeholder for:

- The people who live in the vicinity.
- Those who use False Creek and Georgia Strait as a Recreational Area
- Those who obtain their economic livelihood from these water bodies.
- The flora and fauna of these water bodies and their shorelines that are not otherwise represented.

We are concerned that this proposal will threaten the interests of all of these associated stakeholders.

A major increase in Tanker Traffic in Georgia Strait near Vancouver will endanger these waters and shorelines every day for many years to come. We understand that sealife movement is affected by an increase in tanker traffic - eg. large mammals such as whales and dolphins - even if there is not an oil spill. A "fortiori" if there is a spill.

The tankers would be carrying Bitumen (as well as crude oil). Bitumen is a heavy product close to impossible to clean up. Any oil spill in the pipeline close to Vancouver will likely affect the Fraser River and runoff would come down to the coast and affect our waters including life that lives in the river and ocean for kilometers around.

Any oil spill close to the waters of False Creek as well as upstream on the Fraser River would affect millions of people. Bitumen entering the Creek would be highly toxic, possibly flammable and very detrimental to human, animal and plant health for a long period of time.

We also know that the Lower Mainland and Georgia Strait is at high risk for Earthquakes and Tsunamis. Building higher capacity pipelines and allowing tankers carrying highly toxic substances through such an area are not risks our stakeholders are prepared to support.

We also believe the increase in oil tanker traffic will affect the health of local recreational and other economies which thrive on clean water with plant and animal species. There is little net

gain for people living around False Creek - and a great deal to lose - if tanker traffic closeby would increase. For example - how would an oil spill near the Creek affect the businesses on Granville Island?

As well the bitumen is for export and so would not help local communities. This means any spill which happened would put our local economy at risk for the benefit of getting Alberta Bitumen to market.

The First Nations people used the rich resources of False Creek as sustenance for thousands of years. Since settlement the natural capital wealth of plant and animal species has been largely extirpated. Today some species are returning slowly. We would not like to endanger this positive trend.

Our mandate is to encourage a sustainable human society. We believe that allowing the passage of more tankers carrying Tar Sands oil only solidifies our dependence on an archaic approach with high external costs and few durable benefits to meet our energy needs. We owe it to our grandchildren to create a world in the future without such high dependence on fossil fuels.

Today I received a letter from Trans Mountain Pipeline indicating how close my property is to the proposed pipeline.

I have been a home owner, taxpayer and resident of Burnaby for 7 years. My complex is within the 150 metre corridor of the proposed new pipeline. My special needs daughter goes to one of 22 schools that will be directly affected if the pipeline goes ahead.

No amount of money can redeem the damage to nature and our land that will occur in the event of a spill. The proposed route runs through an established, densely populated residential area with green belt conservation areas, restored lakes and streams, and wildlife. Spills and disasters are inevitable, despite all plans and practices proposed. I am gravely concerned about the event of an earthquake as we are located in a high-risk zone.

My property value will be negatively affected by this project. Recent history over the past several years shows that pipeline spills and disasters are inevitable, despite all proposed emergency plans and practices. I am extremely angry that I have not been given an opportunity to express my opinion on this project. The federal government assumes that is a rubber-stamped done deal and is going out of its way to exclude citizens from voicing their opinion.

The consultation process has been non-existent for homeowners directly affected by this project contrary to NEB guidelines. The construction and operation of this project will put my family's health at risk, not to mention increased noise pollution and loss of trees due to construction. Our trees absorb a huge amount of carbon from air pollution. Our well being and enjoyment of our home, parks and neighbourhood will be adversely affected due to the constant concern about potential health and environmental impacts of spills as well as other malfunctions, during and after construction of the pipeline. At least 40,000 barrels of oil have spilled along the Kinder Morgan pipeline route to date.

If an expansion is approved I would like to know how Kinder Morgan proposes to compensate me for increase in home insurance, due to my proximity to the pipeline.

I own property in Burnaby in close proximity to both the existing and proposed Trans Mountain

Pipelines. I am interested in the safety, health and property-related impacts of the proposed expansion project. A professional regulatory economist, I have experience in reviewing pipeline CPCN applications. I will contribute to the proceeding by using my background to provide the Board with information that will aid its understanding of how property owners within similar proximity to the pipeline will be affected, or may be affected, by the project's construction and operation.

My property is within 800 feet of the existing Trans Mountain right of way; it is within 2,500 feet of the proposed new alignment. (I understand that the eventual specific route will be established subsequent to the CPCN determination.) My property is within the area that would be affected in the event of an accident involving a breach of the pipeline, based on PHMSA- and NTSB- documented events involving similar pipelines carrying similar hazardous liquids.

I plan to contribute to the proceeding by reviewing the Application, submitting Information Requests, and writing a Final Argument (or Final Submission). As an Individual Intervenor, I do not anticipate participating in the oral hearing phase. I will focus on those Issues impacting me as a landowner. I would like more information on how the project may generate both burdens and benefits directly affecting local property owners. I intend to pursue the following Issues in my intervention:

PRIMARY ISSUES

- #10. Potential impacts of the project on landowners and land use.
- #6. The appropriateness of the general route and land requirements for the proposed project.
- #11. Contingency planning for spills, accidents or malfunctions, during construction and operation of the project.
- #12. Safety and security during construction of the proposed project and operation of the project, including emergency response planning and third-party damage prevention.

SECONDARY ISSUES

- #4. The potential socio-economic effects of the proposed project, including any cumulative environmental effects that are likely to result from the project, including those required to be considered per the NEB Filing Manual.
- #7. The suitability of the design of the proposed project.
- #8. The terms and conditions to be included in any approval the Board may issue. I would be pleased to formally collaborate with other local Individual intervenors pursuing similar items from the Issues List. Should the NEB bring forward a means of helping to create or coordinate such groups for the proceeding, I would support that initiative.

I would also support the NEB giving Individual intervenors, whose original Individual intervention registration applications are denied, an opportunity to form suitable Issue-specific groups, and register as Group Intervenor.

I am a retired waterfront property owner on South Pender. My wife and I have invested our life savings into this property to enjoy the complex marine environment, which includes watching and studying the orca pods and numerous other creatures which include waterfowl, and other birds and mammals such as eagles, otter and mink. We are avid kayakers, boaters, divers and fishermen. We frequent the shoreline almost daily.

Friends and relatives from off the island often visit to enjoy these activities. Increased oil tanker

traffic will certainly disrupt the threatened resident orca population and add to the potential of a marine traffic accident and resultant oil spill that would severely decrease our property values and enjoyment of the seashore.

The oil belongs to all Canadians. The amount of oil in Canada and the world is finite. It must be kept for Canadians and this countries future. Oil spills happen and they can not be undone. It is not possible to to protect land and sea from oil spills. It is possible to contain it to the area already contaminated. The board of directors of oil companies do not deserve to make tens of millions of dollars on a Canadian resource. This is about making a few rich people richer. Do the right thing. Think about the future of your children and grandchildren. Remember the disasters that have happened and will happen again. Stop making rules that do not allow all Canadians to have a voice in what happens to our country. It is time for change and it starts with this process.

I have children in the path of this pipeline. It affects me and my family.

I live within a kilometer of the proposed pipeline route and will be directly affected by this project.

I am concerned about the impacts to my neighbourhood during construction, including noise, dust, traffic disruption, and impacts on water, animal and plant life in our area. As well, I am worried there will be significant disruption to local trails where I regularly walk and bike, and access to the Burnaby mountain conservation area from my home could be cut off.

More importantly, I am gravely concerned about the additional risks that the project will bring to the area where I own my home, shop, travel and recreate. The expansion of the tank farm, the new pipeline, and the enormously expanded marine shipping activities all pose the risk of spills and industrial accidents. Burnaby will bear the brunt of irreversible environmental damage in case of a spill, yet there is no significant identifiable benefit to our community from this project, whether in terms of jobs or the supply of needed energy. Rather the pipeline is for export and will primarily feed corporate profits, rather than provide benefits to our community. The proposed pipeline runs adjacent to Burnaby Mountain conservation area, where I regularly hike and mountain bike. Not only will construction of the pipeline negatively impact this area, a potential spill could destroy it. I also spend lots of time at Barnet Marine park and Rocky Point park in Port Moody. With my family, I walk my dog, picnic, and kayak in these areas. Increased tanker traffic will reduce the safety of these activities (kayaking in particular), and erode the quality of the experience in these areas. A spill could completely destroy the waterfront. The route of this pipeline runs through high density, family-oriented neighbourhoods.

The influence and damage of these pipelines on our soils and crops, before, during and after the lifetime of these pipes. Harassment by the pipeline owners and the NEB with rules designed without input from the farmers. Proper and fair compensation has not occurred for the existing pipelines, but should happen. This must happen for any new pipelines, not only compensation for the construction damage that will occur, but also the damage that will happen during the lifetime of these pipes. Negotiations in good faith must happen.

The proposed pipeline will bisect my family's farm land. My family has lived on our ALR land for over 30 years. Currently, my brother Andreas and I are introducing more modern agricultural uses. We are concerned that the pipeline will damage our commercial farming opportunities. There is limited arable land available. We share many of the concerns expressed by other landowners throughout the Salmon River floodplain (e.g. questionable economic value of the

project and danger to near-surface groundwater and deep aquifer) but in this application, we only outline some of our specific concerns. First, the route is very poorly chosen as it goes through a floodplain on our land. The floodplain gets so wet that one cannot drive a tractor through it and if one tried there would be severe damage to the soil and the tractor. There will be no way to get heavy equipment to repair or maintain a pipeline during the wet season. Also, we have experienced landslides from the higher land onto the floodplain. The risk of landslides onto the right of way creates a greater risk that the pipe is damaged from the additional pressure. In the wet season, any oil leakage will easily travel through the flooded lands and into the Salmon River. Regardless of season, oil leakage will seep into our land and flow through the floodplain into our lake, low groundwater and the Salmon River. Second, our land abuts the

My grandparents, parents, and I are all from Burnaby, BC. My family moved to Courtenay 5 years ago. A spill from either the pipeline or one of the daily tankers would have huge environmental and socio-economical effects on the home that raised 3 generations, and our new home on Vancouver Island, not to mention all the other families in the surrounding areas, many of whom are our friends and family.

BC is also full of wildlife and plant life. Both are sacrificed with this proposed plan.

The reason we live in this province is because of the beauty and nature. That goes for most British Columbians, whether they were born here or immigrated. It's also the reason tourists - a large contributor to BC's economy, and people's livelihoods - come here. Constructing and maintaining the pipeline may create a few jobs, but one accident with either the pipeline or the tankers will destroy many, many more than that.

Money aside, the sheer enjoyment of life that comes from living in this magnificent place will be ruined. People may choose or be forced to leave this province. I live right near the ocean, and a spill would devastate our way of life.

In the event of a malfunction/accident (and this will happen), the effects on agricultural land where my food comes from, property values where I live, the continued employment at my job, and the businesses in my area may be disastrous... even from a small spill. There is no proof, and therefore no reassurance, that quick and complete cleanup from an oil/bitumen spill is possible. Even if all measures are taken to ensure the pipeline and tankers are secure, there is the added danger of building all this on an active seismic zone. An earthquake with a magnitude of 9 will be merciless, and the fallout from such large quantities of oil/bitumen... well, I honestly can't imagine how possible it would be to fully recover from that.

I am not even sure why this is being proposed. We are supposed to be moving towards renewable resources. There seems to be a global realization that these proposed methods are archaic because of how damaging they are to all forms of life. It is a plan that serves to benefit only a few, and be detrimental to millions.

I am a full-time employee of the Simon Fraser Sustainability Association, regularly working from our offices at Simon Fraser University on Burnaby Mountain. I am concerned about damage and disruption to my body, my community and my employment from construction and operation of the pipeline in the areas of my commute and daily work. The route of my daily commute runs adjacent to the pipeline route and tank facilities. I often work outdoors at community gardens located on campus and use the Burnaby Mountain Conservation Area for both business activities and personal recreation. During the summer months, I work outdoors on Burnaby

Mountain for more than two hours a day at least three times a week; my health and safety is directly affected by the proposal. I am concerned about harm to my health and safety arising from pipeline spills, ruptures, and an increase in transshipment and tanker activity near my workplace and commuting route. This increase in activity makes potential accidents and malfunctions in the area of my work more likely, directly affecting my health and safety. My proximity to the terminal and pipeline route mean I would be directly affected by an explosion, fire, extreme weather or earthquake event, a chemical accident, or other hazard made more likely by the pipeline expansion. Insufficient emergency response planning and capability as well as insufficient funding for recovery and clean-up will directly affect my employment, health and safety. As a resident of the City of Vancouver, I am also concerned about the environmental and socioeconomic impacts on my City's beaches, the Seawall and Stanley Park, which I use several times each week. Terms and conditions related to funding an emergency and/or clean-up response also concern me as a taxpayer and resident of Vancouver and an employee in the City of Burnaby.

I should be allowed to participate as I know I am directly affected. I believe all citizens that live in the Lower Mainland are directly affected, not just those that live beside the proposed pipeline route. I am a life long resident of the Vancouver area. I move to the east coast for a short time but could not stay there as I did not feel at home, being away from the ocean. It is an absolute necessity for me and my whole quality of life, to have a clean and safe ocean. I do not want my standard of life diminished by an marine oil spill. I believe I have a constitutional right to have the marine environment on the B.C. coast to be safe for me, my children and all the wonderful creatures that share this part of the world with us. I am regularly at the ocean shore in the Surrey, White Rock, Vancouver, North Vancouver and West Vancouver. I am regularly at the Ambleside Dog Park and Kitsilano Dog Park, walking and enjoying the gorgeous view of the ocean and mountains. This aspect is absolutely crucial to my health, both now and long term, and my emotional and physical well being.

The reason I am applying as an Intervenor is I have some very serious questions I would like answers to, and if I am "not at the table" I have no guarantee those issues will be addressed to my satisfaction. To summarize they are: K.M. risk assessment commissioned report says of 1 spill in 2,300 years is ridiculous, and needs to be challenged/"world class safety standard" for tankers do not take into account human error/bitumen now being transported, spill response does not consider the sinking of this product/what dispersants to be used? Corexit?/VPA role-maximum amount of vessels should our port handle?/Aboriginal rights/spill cleanup would cost \$9-\$40 billion - who pays?/KM responsibility ends when bitumen leaves pipe/why NEB given oversight of what DFO should be monitoring (ie fish and fish habitat in Burrard Inlet)/why export raw material to foreign country/28 day application period is not sufficient for proper public consult for a project of this size. Thank you from an extremely concerned citizen of B.C. who has a very strong connection to the ocean due to my aboriginal heritage (Cooksferry Band.)

DIRECTLY AFFECTED

TABLE 2 - Issue 8: The potential environmental and socio-economic effects of increased marine shipping.

Vancouver is my home. My parents grew up here, I grew up here, and I continue to choose to make it my home. It is part of who I am. Who I am, and why I continue to make Vancouver home is inseparably bound up in the natural beauty of the city, particularly the beaches. As a

child, I swam at Spanish Banks. As a teenager, and ever since, whenever I have something on my mind, I walk on the beach, often at Kitsilano. Like many Vancouverites, I make a beeline for the beach to soak up the sun whenever it shines. I bring my out-of-town visitors to the beach. When at UBC, I de-stress by walking home along the beach--often all the way from UBC to Jericho--catching the sunset as I go. On weekends I exercise by running or biking along the beach, perhaps along the Stanley Park seawall. In summers I picnic on the beach with friends and family. My husband and I canoe off the beach, and catch and eat crabs from Burrard Inlet. I hope my children will be able to enjoy the beach as I have. A threat to the beach--such as that posed by a million litres of oil spilled from a tanker--is a direct threat to my lifestyle, my identity, and my emotional and spiritual well-being.

I am representing the Sea Kayak Guides Alliance of BC as an executive Member and owner operator of an Adventure Company in the Gulf Islands or 23 years, Island Escapades. Economically the Sea Kayak Industry brings in over 35 million dollars of direct revenue to the southern British Columbia and Spinoff revenue in the tourism field triple that value. As certified guides we understand the pulse of this marine environment and any oil spill plus increase tanker traffic will have direct and indirect influences on tourism jobs, and direct economic deterrence to our businesses and the Kayaking Industry as a whole. British Columbia's Gulf Islands is known as the Galapagos of Canada, and increasing tanker traffic will affect not only the wildlife that we view but detract our potential Eco Tourism clients from coming to this region. The threats to resident and transient Orcas pods that are attracted to this area are immense and certain, their movements and habits will be affected by the oil tankers and thus influence other marine mammal habits and habitat; directly effecting our industry. Soft invertebrate viewing will be tragically affected by an oil spill and increased tanker traffic along with bird life that attracts a large focus group of clients. The Sea Kayak Guides Alliance has operated for 20 years and represents 300 active members/guides and 200 presently working towards certification within the Kayaking Industry. Our mission statement is to establish, promote and maintain high standards of sea kayaking safety, conduct, and representation through an alliance of professionals. The alliance will be integral in ensuring a high quality of sea kayaking environment for the benefit of all. By increasing the Kinder Morgan Project the effects will be detrimental to our members and threaten our livelihood and that of our employees and families. We understand the balance of nature in our business and count on this balance being healthy - allowing this expansion is in direct conflict with our foundations and will hurt a critical Eco-Tourism industry in BC.

I am a retired teacher who came to the Gulf Islands for the lifestyle, the ocean's bounty, the healthy water, the cleaner air and the marine life. With this twinning of the Kinder Morgan pipeline will come so many more tankers travelling through the Gulf Islands, my home. The inevitable spill will completely destroy the marine life in the Salish Sea. No matter the extent of the clean up the Salish Sea and the land will be forever devastated. With this increase of tanker traffic will come the increased chances of marine life destruction, fishing boat accidents, collisions with The J-Pod whales and the transient whales, with pleasure crafts and sailboats. Economic development at the expense of an oil tanker accident in the ocean's of this valuable and beautiful coast are unacceptable to me and hundreds of thousands of other British Columbians. Tourism of these islands and this province will plummet with tankers coming through the Salish Sea. Needless to say I am not in favour of this proposal and I would hope that he NEB with listen to the concerns of the public and those who will be most affected by this proposal.

DIRECTLY AFFECTED

TABLE 3 - Issue 1: The need for the Project.

This request for Intervenor status in the NEB hearings on the Transmountain Pipeline Expansion is being made because it will have a direct impact on my life in at least three different ways. I would like to address Topic #1 "Is there a need for a pipeline?"

First, for more than a decade, I have been part of a large group of volunteers who have finally succeeded in restoring the wild salmon run in the Tsolum River. I want to see the salmon grow and flourish, and I believe that the inevitable spills from pipeline and tankers will make this impossible.

Second, the taxes and revenue derived from this project by the BC governments amount to \$6.00 and change per citizen. Does this small sum of money justify putting one of the world's most beautiful and fragile coastlines at risk?

Finally, I am a grandmother. I ask leaders and decision-makers to deeply consider how this project will affect the quality of life for the next seven generations of those who will live on our bountiful, unique, and fragile west coast.

RELEVANT KNOWLEDGE or EXPERTISE

TABLE 4 - Issue 7: The potential environmental and socio-economic effects of the proposed project.

In the summers I work as a naturalist for a wildlife/whale-watching company based out of Granville Island, in Vancouver. Increased shipping activities will affect the whales in the area (especially the southern resident killer whales, which are listed under the Species At Risk Act), via either noise pollution or collisions. This will inadvertently also affect my livelihood.

Furthermore, an oil spill in the region whether from a pipeline or from a tanker, would decimate our local ecosystem. As a student at the University of Victoria I have studied the long range effects of the Exxon Valdez oil spill on the communities and wildlife in Prince William Sound. Almost 25 years later these communities are still struggling under the changes imposed on them by this anthropogenic disaster. A population of killer whales which swam through the spill has been completely wiped out. Overall I believe the risks to our ecosystem and our communities would be too great, and limited benefits offered are not worth it. I hope to be allowed the opportunity to express my concerns to the Board.

Dr. Weaver holds a PhD in applied mathematics with a focus on ocean, atmosphere and climate dynamics. His early work examined the physical oceanography of coastal waters including the Strait of Juan de Fuca. He has a long, documented career of published expertise in physical ocean science as a Professor in the School of Earth and Ocean Sciences at the University of Victoria and prior to that, as a Professor in the Department of Atmospheric and Oceanic Sciences at McGill.

Dr. Weaver is a Fellow of the Royal Society of Canada, the Canadian Meteorological and Oceanographic Society, the American Meteorological Society and the American Association for the Advancement of Science. He is the recipient of numerous awards including the 2011 A.G. Huntsman Award for Excellence in Marine Science. He is considered one of the world's experts in ocean circulation modeling and has served on numerous national and international

committees in this regard. He has published extensively in oceanographic journals including: Journal of Physical Oceanography; the Australian Journal of Marine and Freshwater Research; Journal of Atmospheric and Oceanic Technology; Progress in Oceanography; Ocean and Coastal Management; Journal of Marine Research; Ocean Modelling; and Atmosphere-Ocean. As an internationally-regarded scientist, Dr. Weaver has advised local, provincial and international governments on science-based policy. He was a Lead Author on four of the five reports from the International Panel on Climate Change and recently co-authored an expert panel report for the Royal Society of Canada on "Sustaining Canadian marine biodiversity." Dr. Weaver also participated in an oceanographic cruise in the Strait of Georgia, Discovery Passage, Johnstone Strait and Queen Charlotte Strait.

Dr. Weaver's internationally-regarded expertise in physical oceanography and his experience in advising governments on science-based policy uniquely qualify him to intervene on issue 5 and to recommend terms and conditions for project approval under issue 8, particularly as these pertain to research on dilbit in marine environments, the likely impact of a potential spill in BC coastal waters, and gaps in research.

Meanwhile, the economic viability of the pipeline (Issue 2) depends on the economic viability of the upstream oil production. Investors world-wide, have warned about a carbon bubble, whereby global emissions targets will prevent the development of assets that contribute to carbon emissions, raising questions about the viability of long-term oil sands development and the wider economic threat from frozen carbon-based assets.

These warnings have been echoed by reports from HSBC and statements from the President of the World Bank, Jim Yong Kim. As one of the world's foremost climate scientists, Dr. Weaver has been at the forefront of domestic laws and international agreements regarding carbon emissions making him well-positioned to intervene on the likelihood of a carbon bubble undermining the economic feasibility of the project.

As a collective of concerned environmentalists, the Environmental Issues Committee is submitting an intervenor application on behalf of the student populace at Capilano University. We are able to provide a compelling testimony for how this population will be affected daily if the Kinder Morgan expansion project is approved by the Board.

The Gulf Islands and the Salish Sea are considered at high risk for an oil spill. I am a waterfront landowner in the Gulf Islands, specifically on Thetis Island, and an oil spill will affect the economic value of my property, as well as my use and enjoyment of my property. Many birds and marine mammals frequent the marine waters in front of and near my house daily year round, including bufflehead, goldeneye, gulls, great blue heron (a species at risk), kingfisher, mergansers, bald eagle, scoter, marbled murrelet (a species at risk), cormorants, harbour seal, river otter. Marine birds and mammals are very sensitive to oil spills. I kayak daily in the Gulf Islands, and an oil spill will negatively impact this recreational activity, including bird watching and whale watching. I sail throughout the Gulf Islands for 14 to 21 days in the summer months each year and an oil spill will adversely impact this recreational activity. I am a biologist and a writer and I have been writing about the southern resident killer whales for seven years. Southern resident killer whales are an endangered species in Canada and the proposed tanker route travels through their critical habitat. An oil spill will adversely impact this population of endangered whales. Major threats to the southern resident killer whales include toxic

contamination from pollutants and acoustic interference from marine traffic; the proposed marine shipping route for tankers from the project will increase both of these threats.

False Creek Watershed Society - a representative stakeholder for:

- The people who live in the vicinity.
- Those who use False Creek and Georgia Strait as a Recreational Area
- Those who obtain their economic livelihood from these water bodies.
- The flora and fauna of these water bodies and their shorelines that are not otherwise represented.

We are concerned that this proposal will threaten the interests of all of these associated stakeholders.

A major increase in Tanker Traffic in Georgia Strait near Vancouver will endanger these waters and shorelines every day for many years to come. We understand that sealife movement is affected by an increase in tanker traffic - eg. large mammals such as whales and dolphins - even if there is not an oil spill. A "fortiori" if there is a spill.

The tankers would be carrying Bitumen (as well as crude oil). Bitumen is a heavy product close to impossible to clean up. Any oil spill in the pipeline close to Vancouver will likely affect the Fraser River and runoff would come down to the coast and affect our waters including life that lives in the river and ocean for kilometers around.

Any oil spill close to the waters of False Creek as well as upstream on the Fraser River would affect millions of people. Bitumen entering the Creek would be highly toxic, possibly flammable and very detrimental to human, animal and plant health for a long period of time.

We also know that the Lower Mainland and Georgia Strait is at high risk for Earthquakes and Tsunamis. Building higher capacity pipelines and allowing tankers carrying highly toxic substances through such an area are not risks our stakeholders are prepared to support.

We also believe the increase in oil tanker traffic will affect the health of local recreational and other economies which thrive on clean water with plant and animal species. There is little net gain for people living around False Creek - and a great deal to lose - if tanker traffic closeby would increase. For example - how would an oil spill near the Creek affect the businesses on Granville Island?

As well the bitumen is for export and so would not help local communities. This means any spill which happened would put our local economy at risk for the benefit of getting Alberta Bitumen to market.

The First Nations people used the rich resources of False Creek as sustenance for thousands of years. Since settlement the natural capital wealth of plant and animal species has been largely extirpated. Today some species are returning slowly. We would not like to endanger this positive trend.

Our mandate is to encourage a sustainable human society. We believe that allowing the passage of more tankers carrying Tar Sands oil only solidifies our dependence on an archaic approach with high external costs and few durable benefits to meet our energy needs. We owe it to our grandchildren to create a world in the future without such high dependence on fossil fuels.

On Vancouver Island we share the waters this project risks contaminating, known as the Salish Sea. Here we eat ever-diminishing wild seafood like clams, oysters, crab, scallops, and of course sacred salmon. Our access to traditional, economical and safe foods would be affected by this project, in at least three ways: 1) Forest watershed habitat damage from new construction potentially resulting in watershed contamination and reductions in salmon-spawning capacity, 2) increased spill contamination risk from increased pipeline capacity potentially contaminating coastal food supplies, and 3) increased spill risk from increased tanker traffic/capacity potentially contaminating coastal food supplies.

We believe this project poses unacceptable increased risk to coastal economies that rely on healthy marine environments for healthy industries to remain viable, including but not limited to aquaculture farms, shellfish harvesters, fishermen of every stripe, tourism and nature-based accommodations, even the controversial ocean-based fish-farming operations. It would be unwise for a panel to approve such a project, for they would be knowingly colluding with a corporate interest by allowing them to risk contaminating the primary food source and therefore the very survival of the coastal people of the Salish Sea, including residents of Vancouver, Victoria, and the entire southern BC coastline, according to field spill-demonstrations. Thus I urge you, as respectable public servants, to please do your duty to these members of the public who will be most directly affected by any decision in this case, and do not allow corporate interest to further jeopardize individual health for those of us living in the proposed project's range of effect. We have seen enough contamination to know that accidents from these projects do not go away. We support the right to protect the health and safety of one's bioregion, and stand with everyone affected by this project, to say, "No, we can't accept your project as it endangers too much sustainable food supply and marine environmental health."

The PEA represents licensed professionals who work directly for the Province of BC. These include Engineers, Geologists, Foresters and Agrologists.