

The Gateway Project is being touted by the BC Government as the economic gateway to the burgeoning Asian markets. The planned expansion of DeltaPort, ([www.tsi.bc.ca/deltaport.htm](http://www.tsi.bc.ca/deltaport.htm)), and its rail and road infrastructure are a big part of this campaign.

The Municipality of Delta would suffer greatly under the current Gateway plans, the most damaging of which would be the South Fraser Perimeter Road.

([www.eao.gov.bc.ca/epic/output/html/deploy/epic\\_project\\_home\\_196.html](http://www.eao.gov.bc.ca/epic/output/html/deploy/epic_project_home_196.html))

Loss of Heritage, the eviction of many families through property expropriation, (including several of our Pioneer Families), disturbed archaeological burial sites, destruction of wildlife habitat, and a severe reduction in the livability of residential neighbourhoods due to increased noise, light and air pollution, along with the resulting loss of health and property values. There is also the threat to Burns Bog, an internationally renowned and very rare ‘raised bog’ that is described as the ‘Lungs and Kidneys’ of the Lower Mainland for its air cleaning and producing qualities. These are not some ‘Nimby’ ideals, they are the facts!

The Sunbury Neighbourhood Association, while concentrating on the impacts to North Delta, have tried to bring forward the concerns of Delta as a whole, as well as comments on the impacts of the entire project.

We were given a short amount of time (60 days) to review and respond to 3500 pages of documentation in the Environmental Application, and while it was not possible to properly cover all issues, we have managed to identify and highlight the main impacts.

A summary of our concerns and the related quotes from Gateway’s own Environmental Application Technical Volume Documents that support our position are listed below, with added links to some of the articles, letters and groups that defend this position.

**Comments**

**Vegetation and Wildlife**

The Gateway documents list and identify the many different species of plants, birds, mammals, reptiles, amphibians, and insects that will be negatively impacted, including the many rare and endangered species. Despite these recognized impacts, the proponent is prepared to build this project through areas that are red- and blue-listed species habitats. These sensitive environments that would be reduced in size, fragmented, (and in some cases eliminated), creating islands of habitat that will not be able to maintain their genetic fitness. These areas are known for species of special concern and have been designated and listed so that they can be protected.

([www.env.gov.bc.ca/atrisk/red-blue.htm](http://www.env.gov.bc.ca/atrisk/red-blue.htm))

([www.sararegistry.gc.ca/default\\_e.cfm](http://www.sararegistry.gc.ca/default_e.cfm))

Northern Red-legged Frog  
(Species at Risk Act;  
Schedule 1, Special Concern)



Western Screech Owl  
(Species at Risk Act;  
Schedule 1, Special Concern)

**Related reference, quote and/or link**

*"...there are approximately 215 bird species common in the Fraser River delta; additional very rare, casual and accidental species total another 88 species. This species richness, well in excess of 300 species, **establishes the delta as one of the most important concentrations of bird habitats on the West Coast.**" (Technical Volume 12, p. 60, 5.4.1, para 1)*

*"Larger tracts of forest or other ecosystems are always preferable ecologically to smaller ones, especially those that are 'islands' surrounded by inimical habitats. **Larger blocks of habitat are more viable, are usually more diverse structurally, and support a greater variety of fauna. Many species of wildlife also require larger forest patches for parts of their life cycle.** The quality of an ecosystem can be adversely affected if construction causes disturbance including loss of habitat and the introduction of sharp new boundaries between useable and non-useable habitat". (Technical Volume 12, p. 105, 6.2.2.2)*

*"By definition, red-listed habitats are endangered or threatened by extinction, and blue-listed habitats are vulnerable to becoming endangered, threatened or extinct. **Loss of these habitats within the study area through clearing would thus be highly significant given their increasing scarcity in the Lower Mainland.**"(Technical Volume 12, p. 46, 4.5, para 1)*



Streambank Lupine  
(Species at Risk Act;  
Schedule 1, Endangered )

*“These designations reflect the habitats’ rarity within the Province. Many of the surviving forests in the study area represent red- or blue-listed habitats that are the only remaining habitat In an area.....each of these remnant habitats has the capability to be as ecologically valuable as similar habitats in a pristine environment...”*(Technical Volume 12, p. 34, para 2)

*“Impacts to species at risk are high, due to potential impacts to Pacific Water Shrew habitat resulting from clearing within 100m of the creeks in the Delta ravines, and losses to the western screech owl habitat in McAdam creek.”* (Technical Volume 12, p. 123, 6.4.3.7)  
For some reason this paragraph only mentions two of the nearly 20 species at risk that can be associated with the North Delta Ravines.

There is also a deficiency with the calculations for Riparian Habitat. Gateway does not consider wildlife corridors, nor the entire bank of the Fraser River despite much of it serving as a vital part of the Fraser River ecosystem and home to species of special concern. These vegetation corridors and semi dry creeks and ditches play a vital role in the migration and foraging of all creatures. (Hence the term ‘Riparian Habitat’)

Tier Classification was used to determine the importance of habitat for the purposes of mitigation and compensation, however in ranking these habitats the determining factor was whether or not fish were present. This does not take into consideration other environmental values of vegetation as a wildlife corridor. In the instance of the North Delta Bluffs and the eight ravines connected by upland forest, Riparian habitat was not considered as a whole.

Instead, the mouths of the eight ravines would be blocked by the split level bridge spans, affecting light, moisture and temperature, thereby affecting the plants, insects, birds, reptiles, mammals, and fish that depend on these ecological habitats.

As proposed, the entire face of the bluffs would be paved in a split-level, four-lane highway. All of the natural vegetation would be cleared including the only mature evergreen trees within 75m of the Fraser River, from Deas Slough to Barnston Island – 25 kilometers of shoreline. These trees are used by the Bald Eagles and other Raptors for hunting and nesting, and play a big part in maintaining our region’s air quality.

*“...riparian forests in the study area that are impacted, and for which there is a residual affect, include those areas adjacent/parallel to stream channels through the Delta ravines...This habitat is important for VEC including red-legged frog, amphibians, other birds and the pacific water shrew.”* (Technical Volume 12, p. 141, 8.5 Riparian Forest).

*“The Fraser River escarpment, which has some riparian ecosystem functions, was not assigned a tier designation because this feature is not a watercourse and the SFPR does not cross the Fraser River.”* (Main Binder, pg. 239, paragraph 4)

*“Non-salmonid-bearing watercourses that don’t provide food and nutrients to salmonid-bearing watercourses were not calculated (0 m riparian zone)”* (Main Binder, p. 233, 7.4.2.4 Impact area Analysis)

*“For watercourses with no fish presence or fish resource values (habitat rating 0) no compensation is required.”* (Main Binder, p. 233, 7.4.2.5 Habitat Balance).

*“Sharp-shinned hawk, Cooper’s hawk, great horned owl, and western screech-owl are forest raptors...as a group they were observed over the length of the study area. Within the study area suitable woodland habitat for these species occurs...from Burns Bog along the south bank of the Fraser river to the proposed link with Golden Ears Bridge. All these species likely breed in the study area...”* (Technical Volume 12, p. 65, para 1)



Vancouver Island Beggarticks  
(Species at Risk Act; Schedule 1, Special Concern )

“...upland forests in the study area that are impacted represent a residual affect. This includes those sites adjacent to the Delta ravines... *This habitat is important for VEC including red and blue listed plant communities, large and small mammals, western screech owl and the Vancouver Island Beggarticks.*”  
(Technical Volume 12, p. 141, 8.4 )

“*Travel corridors, feeding sites and nesting sites will be bisected or lost, and individuals will have to adjust their movement patterns to avoid the highway.*” (Technical Volume 12, p. 107, 6.2.3.4, para 3)

“*Denuding and destabilizing the lower escarpment during railway construction, and the installation of culverts at several rail crossings, have also impacted these watercourses and the Fraser River.*”  
(Main Binder, pg.239, paragraph 2).

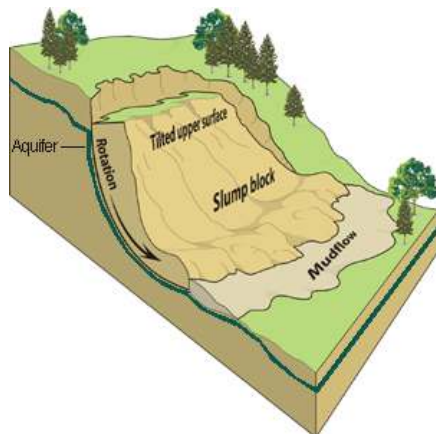
**This admitted impact from the railway is small compared to the impact of building a two-level 4-lane highway with retaining walls that cover the entire habitat.**

### Geotechnical Instability

The North Delta slopes are well known for their instability by local residents, the BNSF rail company, insurance companies and Gateway. The vibrations from the trains, with their increasing weight and length, are causing cracks in the foundations of homes and other structures along the escarpment.

The Rail company installed electric wires at the bottom of the slope to give notification of the slides that occur each year.

Old timers talk about the 1948 earthquake that caused a chasm to open up along River Rd. that was “so deep you couldn’t see bottom”. After a couple of weeks it reseated itself and not too long after that River Rd. was paved. These clay banks are leaned up against glacial till, silt and sand... and the sloughing is kept in check by the



roots of the vegetation. An underground aquifer adds to the separation of the surface clays and silts from the Pre-glacial deposits. The stripping of the vegetation and the added weight and vibrations of a highway structure

Geotechnical Engineering Input Report, Pg.13,  
5.4 BNSF/North Delta Escarpment

“*the steep slopes of the North Delta Uplands which have experienced stability problems in the past.*”

“...localized alluvial deposits greater than 10 m thickness may overlie the glacial and inter-glacial deposits at gullies and ravines.....*with perched conditions and confined aquifers under artesian pressure to be expected.*”  
(paragraph 4)

*Cross-slope segments within competent ground areas between the Alex Fraser Bridge and Elevator road will present special risks and challenges to Highway development, with design and construction of relatively high cuts. Fills and retaining walls constrained by the soil and groundwater conditions combined with the steep topography, previous or existing areas of instability, and the presence of numerous ravines.*”  
(paragraph 5)

“*Work in proximity to existing watercourses, culverts and utilities will present special challenges related to total and differential settlements.*”  
(Pg.14, para 1)

“*The lower mainland and Vancouver Island of B.C. experience about 300 earthquakes per year.*”  
(Main Binder, Pg. 499, paragraph 2)

combined with the pressures in an underground aquifer would greatly increase the possibility of the slope peeling away.

The ground around Burns Bog, Tilbury and Sunbury industrial areas and the lowlands from Fraser docks all along the south side of the Fraser River is soft with peat and silty sand. This makes for a difficult and expensive place to build a highway. Peat levels are over 200 feet deep in some areas and the vibrations from truck and train traffic create a constant need for repair and replacement of the existing infrastructure. Building a highway and raised viaduct structures in these soil conditions will be more than an engineering challenge; it will be an expensive and risky proposition.

**Burns Bog** has been cited as being the finest example of a raised bog in the northwest of North America. The bog is unique regionally, provincially, nationally and perhaps internationally from an ecosystem perspective. It is the largest domed peat bog in North America and one of the largest in the world.

Described as the ‘Lungs and Kidneys’ of the Lower Mainland, for its air and water cleaning qualities, Burns Bog has over 5,000 acres of protected lands that are covered by a covenant that states:

**“the Province, Delta, and the GVRD shall not do anything, or allow anything to be done, that does or could reasonably be expected to destroy, impair, diminish, negatively affect, or alter the Bog or (it’s) amenities.”**

Gateway’s own documents clearly show that the SFPR would severely impact this rare and sensitive jewel. Building a major roadway along the northern and western sides of the Bog would be contrary to a legal and binding document that was signed by all levels of Government that is to protect the Bog in perpetuity.



**Sloughing of the slope near the North delta ravines.**

*About 57% of the original Burns Bog area has been substantially disturbed (Hebda et al. 2000).*

*Therefore it is vitally important to maintain the functionality of the critical ecosystem that currently exists. Disturbance to bog ecosystems cannot be reliably restored, and research on restoration is in its infancy. Hence certain restoration or enhancement can only be viewed as an experimental approach.”*

**(Technical Volume 12, p. 141, para 2)**

*“Bogs are particularly sensitive to physical, hydrological, and chemical disturbance. In order to maintain essential ecological functions such as peat production and accumulation, vegetation and ground surface must remain intact...”*

**(Technical Volume 12, p. 46, 4.5.1 Burns Bog)**

*“Bogs are complex ecosystems requiring a particular set of biophysical conditions...Due to interactions between vegetation, peat accumulation, chemical conditions, and water movement and storage, impacts to one ecosystem component will affect others.”*

*“The estimated loss of habitat with vegetation and wildlife values from Burns Bog is 12.78 ha...This includes...areas with attributes required to preserve Burns Bog viability.”* **(Main Binder, p. 350, Potential Impacts to Burns Bog)**

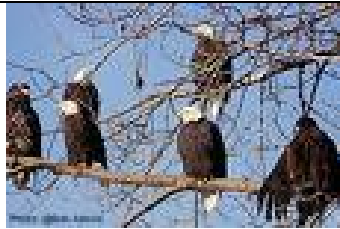
*“An estimated 12.78 ha of land supporting the viability of Burns Bog...would be impacted due to the SFPR. About 7 ha of this is zone 1 land with attributes required to preserve the viability of Burns Bog...”* **(Main Binder, p. 366, para 3)**

*“Burns Bog is the site of the red-listed Lodgepole Pine-Sphagnum ecosystem, which would be affected by the SFPR...”*

**(Main Binder, p. 351, Potential Impacts to Burns Bog)**



The area of Delta known as ‘Sherwood Forest’ is a wooded parcel between the edge of the Bog and Crescent slough. It is an important part of Burns Bog and is one of the best representatives of



a ‘Lagg Zone’. It is crucial to the water flow between the Bog and the Fraser River. It is also home to the largest Spruce trees west of the Bog, (with trunk diameters of 6 feet in circumference), and many species of birds and other animals some of which are rare, threatened or endangered, including the Sandhill Crane.

Gateway has refined the alignment to run along the edge of these woods which will interfere with the flow of ground water between the Bog and the Fraser River, and add noise, light and air pollution that would affect nesting and roosting conditions.



An informal count of Bald Eagles along one edge of these woods on March 10<sup>th</sup> 2007, found over 36 birds.

Bald Eagles roosting by the woods

This tree is directly in the path of the proposed SFPR.

*“The high species richness of birds documented in Burns Bog is likely due in part to the variety of forested habitats occurring in these segments of the proposed alignment.”*

(Technical Volume 12, p. 69, para 4)

*“...the surviving woodlands become too small for some species, leading to...an alteration in species composition and ultimately a reduction in species diversity...”*(Technical Volume 12, p. 74, para 4)

*“The Society notes that the proposed South Fraser Perimeter Road routing almost certainly transects the Burns Bog lagg zone and may negatively impact the lagg zone and the Bog itself via:*

- *Potential below grade disruption on the water hydrology and thus the lifeblood of the Bog;*
- *Potential traffic generated fugitive dust and water spray penetrating the Bog proper; and*
- *Potential wildlife disruption and possible loss of rare and endangered species.*

*It was also noted at the recent SAP meeting that the proposed road would go through “Sherwood Forest” on the Nottingham farm. This section is perceived as the last bit of original lagg in that area and necessary for future investigations of the function of the lagg and it could possibly provide vital information on managing the lagg of the Bog for its future conservation. This lagg section is scheduled for destruction BEFORE sufficient scientific research can be carried out to determine the proper management of the Burns Bog lagg.”*

(Burns Bog Society letter to the E.A.O.)

([www.burnsbog.org/resources/submission.shtml](http://www.burnsbog.org/resources/submission.shtml))

## Fish Habitat

The North Delta Bluffs contain 8 urban ravines, (4 of which are Environmental Reserves). These ravines are home to Salmon- and Trout-bearing streams. Under the current plans, the mouths of these ravines would be covered by twin highway spans that would shade the ravine from light and rainwater. A considerable amount of rainwater will evaporate from the warm pavement, and the water that does make it down into the creek will be polluted with road run-off, (hydrocarbons, lubricants, antifreeze, windshield washer fluid, and salt). The entire biodiversity of these ravines from aquatic insects and plant life, to the Bats, Hawks, and Bald Eagles that live there will be impacted. At the same time, the GVRD has recognized the value of biodiversity and is investing money to develop a Biodiversity Action Plan to conserve and connect significant ecosystems and habitats.

Furthermore, the Fraser River is directly affected by the health of its tributaries. Mitigation plans cannot protect against changes in water quantity and quality in these streams. Clearing trees and vegetation from the banks of the Fraser River and its tributaries will significantly impact the light and temperature of these waters which, in turn, will negatively affect the vegetation, insects and fish populations that inhabit them.



## Hydrogeology

Water movement is especially important to the well being of our urban streams, the Fraser River and Burns Bog.

Pushing a new highway along the Fraser River, through ecological reserves, and along the north and western sides of Burns Bog would severely impact the water flow for these systems. The rain shadow of the highway would reduce the amount of water over its entire length through evaporation. A major highway along north and west edges of Burns Bog would interfere with the natural flow between the Bog and the Fraser River upon which they both depend.

*“Red-coded habitats include productive and diverse habitat features that support **critical fish and wildlife functions**...in these cases **alternative siting and design mitigation must be pursued to the maximum extent possible.**” (Technical Volume 9, pg. viii, para 1)*

*“From the Alex Fraser Bridge to the Delta –Surrey border, most of the watercourses are located within **steep, wide ravines and are in a relatively natural condition with meandering channels and wide, forested riparian areas.**” (Technical Volume 9, pg. 22, para 5)*

*“Where a bridge over a ravine was proposed, it was assumed that impacts to aquatic habitat were nil...  
...**Impacts to riparian habitat were calculated by multiplying the proposed width of the bridge by a riparian width of 30 m for each side of the watercourse (in the case of a bridge over a salmonid-bearing watercourse).**”*

**(Technical Volume 9, pg. 8, para 2)**

*“...**certain types of disturbance to these habitats, such as by clearing adjacent areas and thus altering light, wind, and drainage regimes can significantly degrade their quality.**”*

**(Technical Volume 12, pg. 46, para 3)**

*“...**relative to those of animals, whose populations can be affected at considerable distance from the immediate project footprint.**”*

**(Technical Volume 12, pg. 15, para 4)**

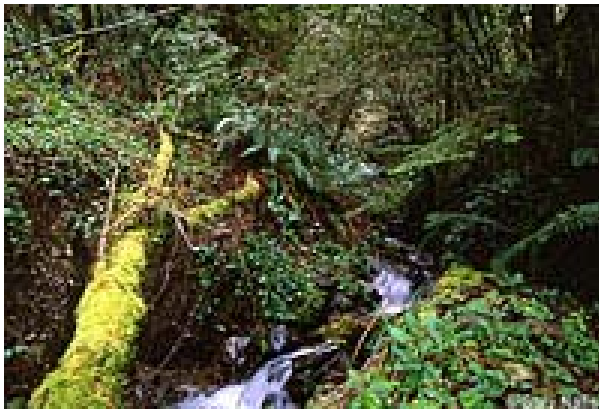
*“...**the physical extent of the Burns Bog water mound is the primary influence on the overall viability of Burns Bog.**”... “**the proposed roadway is aligned directly over portions of the mound...**”*

**(Technical Volume 10, pg. 47, paragraphs 3& 4)**



## Water Quality

The quality of the water in our urban streams is very important not only to the fish and wildlife that live there, but also to the Fraser River which is the largest salmon producing river in the world, and is listed as endangered. Running a new highway along the banks of the Fraser River, through the environmentally sensitive North Delta ravines, our agricultural farmland, or anywhere near Burns Bog would subject them to polluted roadway run-off of hydrocarbons, grease, and chemicals daily, as well as large spills from accidents, (which, even in the case of minor fender-benders, almost always leak antifreeze), and which may include hazardous materials from overturned semi-trailers. The water balance in Burns Bog is especially important for the rare and endangered plants that inhabit it, and for the life of the bog itself. As a Municipality and indeed a Nation we are trying to maintain and enhance the quality of our water, and building the highway where proposed would be counter to these ideals.



*“Historical water quality data **were not available** for the water courses within the SFPR footprint”,  
(Technical Volume 11, p. i, para 2)*

*“limited historical water quality information **was available** for the SFPR project area.”  
(Technical Volume 11, p. 6, para 1)*

*“Historical water quality data in tributaries located in the study area **were reviewed**....”  
(Technical Volume 11, p. 6, para 3)*

*“Historical water quality data **were not available** for the Fraser River tributaries along the SFPR alignment.”  
(Technical Volume 11, p. 19, para 1)*

*“No relevant site-specific historical water quality data for tributaries in the study area were found.”  
(Main Binder, p. 311, para 1)*

*“Historic water quality data **were not available** for the Fraser River tributaries located along the SFPR alignment.”  
(Main Binder, p. 315, para 6)*

**The Corporation of Delta website states that;**  
*“historical water quality data for a number of creeks within the Delta section of the SFPR was provided to Gateway.”*

## Agriculture

The Agricultural Land Reserve (ALR) was set aside in 1973 by the Government of the day because they realized the importance of preserving this exceptionally fertile farmland for the future production of food for the Nation. While our population continues to grow, little by little it is chipped away for development, and there is always a public outcry.

Now the Transportation Ministry is trying to disguise the fact that their Gateway proposals will eliminate or render useless 1,000 acres of A.L.R. land and poison much more with roadway run-off and diesel particulate. Alternate proposals by the Municipality of Delta and concerned citizen groups would reduce this waste more than tenfold.



## Socio-Community

The impacts to our communities will be severe. The diminished air quality from running a new highway past 20 schools and 46 parks and playgrounds will elevate cancer deaths and respiratory diseases in us and our children, compromising health and learning. Add to this the noise and lighting pollution from a 24/7 freeway to the residential areas that are currently backing onto greenspace, and the result will be a drastic drop in property values that are all some people have for their life savings.

The current plans would also evict over 70 families in Delta alone, (more than 150 project wide), through expropriation, some of whom pioneered the area, and would force the closure and removal of several businesses, cut off neighbourhoods, and require many people to take the new freeway to get to work in their own community.

Gateway only considers structures when they speak of Heritage, but many pioneer families that live in the way of the proposed highway are being driven out by expropriation:

- Mrs. Burr of the Burr family that so many Lower Mainlanders are familiar with, (Raymond Burr and the heritage site of 'BurrVilla' at Deas island),
- The Johnsons, (Johnson Wynd),
- The Sheaves, (Sheaves Crescent, Sheaves Court and Sheaves Rd.),
- The Iversons, (Iverson Crescent), (Mrs. Iverson is in her nineties and has lived at that spot on the river for over 75 years).

Heritage buildings that would be negatively impacted or whose futures are uncertain at this point:

- Glenrose Cannery Night Watchman's Shack, (1897?),
- Nesbitt residence, (Cannery managers house 1939),
- Jensen Residence, (1912), that may be spared but will lose its grand driveway, vegetation buffer, and solitude,
- Stokkeland residence, (1913),
- Gunderson residence, (1902),
- Larsen residence, (1905),

The Starhiem (Anton Christianson) Residence, (1915), nestled in the Norum Creek Ravine may be expropriated for habitat compensation or be left to languish behind a two tier bridge where there once was a beautiful view.

Hazel Norum, (Norum Point Rd.) the Iversons, and many other families that live along the river would no longer be able to look out their living room windows and keep and eye on their net sheds, fish boats, and business assets



Incomplete lists of the 46 parks and playgrounds, and 20 schools within 500 metres of the proposed SFPR. (Technical Volume 15, pg. 27, 4.4.5 & pg. 34, 4.4.6.)



**Alfred Jensen Residence 1912**

*“The limited access nature of the corridor will make it difficult for residents to use or cross the SFPR to access different parts of their neighbourhood or other neighbourhoods. This will especially be the case in more urban areas, where neighbourhoods depend on ready access to local schools, and similar community areas, or where there is neighbourhood interest in maintaining a connection to special community features, such as the Fraser River waterfront.”*  
(Technical Volume 15, pg. 65, 6.6, Community Cohesion)



day and night, which is especially comforting during stormy weather. The proposed route would force them to move their homes and in some cases move their businesses too.



The Norum Residence, over looking Gunderson Slough would be replaced with the upper tier of the highway that would cover this hillside

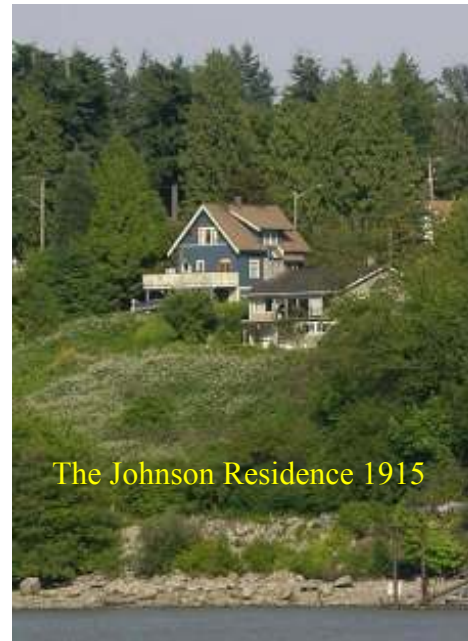


The context of these homes within the community, with these founding families that have been here for generations working the Fraser River and Gunderson Slough is something that Gateway just doesn't understand.

*“...the over all impact of the SFPR on existing communities is deemed to be relatively benign.”*  
(Technical Volume 15, pg. iii, paragraph 6).



Starhiem Residence.....originally Anton Christianson's house 1915



The Johnson Residence 1915

### Local Air Quality

Gateway's documents spell it out quite clearly. Close proximity to a major roadway will result in an increase of cancer deaths and respiratory diseases...Period. Bringing a new highway through residential neighbourhoods with schools, parks, playgrounds and subdivisions will not only increase the mortality rates in these areas, but also the suffering from chronic

*"Levels of cancer risk in 2003 on existing roads, particularly on major cross roads (Lander Trunk Road, Highway 99, and the Alex Fraser and Pattullo bridges) exceed the generally accepted risk threshold of 10 additional cancers per one million inhabitants...the lifetime cancer risk will continue to exceed the risk threshold in the localized areas where other major roads cross the proposed SFPR route."*  
(Technical Volume 7, Page ii, para 4)

respiratory conditions. Health care costs will be driven up – something that the government is not considering in the total costs of the project.  
 (The increase in P<sub>2.5</sub> particulate alone will cost \$600,000 per tonne each year. How much more will the Sulphur Dioxide, Carbon Monoxide, Nitrogen oxides, PM<sub>10</sub> particulate, Ozone (O<sub>3</sub>), Volatile Organic Compounds, Ammonia, or Greenhouse gas emissions cost?)



(Photo courtesy of Environment Canada website)

*"Locally (within 1 km of the SFPR) emissions from traffic on the SFPR are predicted to cause an increase in concentrations of the various contaminants."*  
 (Technical Volume 7, Page 63 para 3).

*"An analysis of the highest concentration response factors indicates that the risk maybe 20% higher for most morbidity outcomes."*  
 (Technical Volume 7, Page 115, 6.5.7.3, para 3)

*"US EPA has determined that diesel exhaust is likely to be carcinogenic to humans by inhalation from environmental exposures."* (Technical Volume 7, Page 55, 11.8, para 1).

*"PARTICULATE MATTER: Human Studies: Epidemiological studies indicate that long-term exposure to particulate matter is associated with increased mortality, respiratory disease, decrease in lung function and possibly with increases in lung cancer."*  
 (Technical Volume 16, Pg. 77, Table 26).

*"estimated economic damages from PM<sub>2.5</sub> related health problems per tonne of PM<sub>2.5</sub> emissions are substantial (i.e. approximately \$600,000 per tonne)"*  
 (Technical Volume 16, Pg. 51, paragraph 4)

**Regional Air Quality**

The method of modeling used by Gateway is an attempt to minimize the perceived impact by throwing out 15 years worth of G.V.R.D. baseline traffic emission numbers and predicting much lower future numbers than the traffic studies done by the G.V.R.D. or at our major Universities. Even so, Gateway's own low numbers indicate a health care cost increase in the hundreds of millions of dollars. In an era of increased awareness about Global warming, International Airshed Treaties, tree protection strategies and the need to maintain green-space, it would be environmentally unconscionable to build a highway along the banks of the Fraser River, through the ravines of the North Delta Bluffs, or anywhere near Burns Bog.

*"Human Health is the second largest category impacted by the Gateway program and PM<sub>2.5</sub> emissions account for 75% of health-related economic impacts."* (Technical Volume 16, Pg. 51, para 4)

*"With increased air pollution there can possibly be increased employment (e.g., in the health sector) because of the economic activity associated with correcting the results of its impacts."*  
 (Technical Volume 16, pg. 39, 4.3.5 Employment)

*"The Gateway Program is responsible for about 42% of the projected total net increase in economic impacts from Global Warming."*  
 (Technical Volume 16, pg. 60, paragraph 1)

**Noise**

Sunbury, Annieville, Royal Heights, and Fraser Heights are all neighbourhoods that are on a hillside with ravines stretching up into them. This type of topography is more inherently subject to highway noise by its shape. Volume 13 **incorrectly** concludes that there would **not be** significant negative impact on residential areas, particularly in North Delta where predicted (2021) noise levels would average an unacceptable 68.0 to 73.0 decibels (dBA).

Nelson View, Collings Way and Norum Place are located on bluffs with large Ravines on either side, and will overlook the SFPR split grade alignment. *"Such situations would require terrain-mounted barrier designs wrapping around each residential enclave to prevent sound from flanking around the sides of the barrier.....but due to local topography this not technically feasible within the highway right-of-way."* (Technical Volume 13, Pg. 39, Bullet 5)

Health Canada's National Guidelines for Environmental Noise Control are 55 dBA daytime (07:00 to 23:00); 50 dBA night time (23:00 to 07:00), which prorated over 24-hours gives an Leq (24) of 54 dBA. These levels are considered thresholds for the onset of significant noise impacts, and **65 dBA or greater (Leq (24)) is indicative of a serious noise problem.** The proponent admits that noise levels will affect normal speech inside our homes and be disturbing to sleep patterns – but they only consider first and second rows of houses in their count. The noise will travel much further.

The measuring devices for the study were placed at near ground level and even the company that did the study admits that a raised viaduct like the ones that are planned for our residential neighbourhoods will send the noise pollution much further.

Mitigation for this noise is a 3 metre wall built along the highway, (including the viaducts), which they admit will block more view than noise, and 'Quiet pavement' that attains at most 3 or 5DBA abatement in dry conditions. When 'quiet pavement' is wet, it does very little!

### **Contaminated Sites**

The proponent has not properly determined the extent of the contamination of these sites in size, or depth, or cost. The so-called pre-construction mitigation is in fact the "Preliminary Site investigation" (PSI) which consists of third party subsurface sampling and lab testing of the samples taken from acquired properties classified as Tier 1 only. The true extent of the contamination is as yet unknown for a very large area of land in the proposed alignment that is classified as Tier 2, for which the pre-construction mitigation is cited as asking the owner of the site a number of potentially incriminating questions about their land use.

Why are the actual affected land area and estimated depths of contamination not included in this application? The costs of determining the extent of the job, plus the clean up costs will be horrendous. Considering that 1997 soil remediation costs were \$1500-\$3500 per ton, and a ton equals a cubic yard of earth, a conservative estimate for the SFPR foot print is in the thousands of cubic yards and, therefore, the cost of just the cleanup well into the millions of dollars.

The survival and protection of the local environment cannot be adequately determined on the basis of the data presented in Technical Volume 8, And the costs of investigation and cleanup together would be in the tens of millions at the very least.

*"Number of people (affected) estimated based on the first one or two residential rows on either side of the highway alignment..."*  
(Technical Volume 13, Pg. 30, Table 5.4, sub 1)

**Average predicted SFPR noise levels for North Delta is 68.0 dBA Leq (24), and 73.0 Ldn**  
(Technical Volume 13, Pg. 32, Table 5.6)

*"The increase in the percent highly annoyed with the addition of the construction noise to the baseline noise varies from 0% to 66.6% and, on average, is 14.6%"* (Technical Volume 13, Pg. 30, 5.2.3, para 3)  
*"A 6.5% increase in the numbers of highly annoyed residents is considered to represent a severe impact"*  
(Technical Volume 13, Pg. 31, 5.2.3, para 1)

*"It should be noted, however, that studies have found that the acoustic performance of OGA [Open-Graded Asphalt] is reduced after a rainfall, until the residual rainwater dries from the surface."*  
(Technical Volume 13, pg. 36, para 4)



## Archaeology

The archaeology of Delta is deliberately given a low profile to prevent looting of sites that date back almost 9,000 years, even though Delta's archaeology is well documented in many studies, is of International renown, and has been exhibited at World Fairs in Edinburgh and Paris.

Gateway has tried to downplay the significance of these sites while their documents admit the entire footprint of the highway is likely to impact archaeological materials (except for the 7.3% of the corridor under existing roadways).

There also appears to be a deliberate downplaying of the burial sites with brief references spread throughout the text, tables and maps showing only partial lists with notable omissions. In fact, the whole area, from Nordel Way to possibly as far as Elevator Road, is a large cemetery with human remains likely to be encountered. This carefully avoided fact has been confirmed in conversations with First Nations and is supported by the documentation of over two dozen burials in that section.

Gateway recognizes that mitigation costs would be significantly higher than the \$1.4 million (in 2003 dollars), that 63 cubic metres cost to sift and process when the Alex Fraser Bridge was built. More stringent methods are required today and Gateway expects that the amount of known intact midden materials would be over 2,000 cubic metres, with a likelihood of much more to be found in the footprint area. Therefore, the projected cost of properly investigating the extent of these spots and the mitigation costs to complete a proper data collection program would be well above the \$30 million they've set aside to pay for **all additional** mitigation costs.

Conservative estimations put the cost of properly investigating and mitigating the North Delta Bluffs approaching \$100 Million in 2004 dollars.

In the early 1980s, the finding of human burials forced the re-engineering of the footing for Alex Fraser Bridge, however the new footing site was not investigated and as a result, a large portion of the St. Mungo site was destroyed.

In 2004, the U.S army Corp of Engineers attempted to build a dry dock at the Hood Canal crossing in Washington State and after spending U.S. \$86 million dollars and 15 months of uncovering artifacts and burials, they terminated the project.

*"In the study area, 29% of the total areas was classified as high archaeological potential, generally due to the proximity to the Fraser River... The highest potential areas were focused along Crescent Slough, and along the Fraser River from west of the Alex Fraser Bridge to Elevator Road..." (Main Binder, p. 418, 8.2.3.5)*

*"...a local resident had reported that the GVRD outfall pipe was constructed through a midden at this location. As no midden deposits were observed during the archaeological assessment, it is presumed to be destroyed, if it ever existed."*

**(Technical Volume 14, pg. 105, 8.10 Norum Creek Site)**

*"No investigations were conducted on, or to the south of, the BNSF Railway right-of-way..."*

**(Technical Volume 14, pg. 97, 7.2.10 Norum Creek Site)**

*"Costs associated with the Provenance research investigation were \$700,000 (Hansard 1984) or \$1,400,000 at 2004 values. Given changes in the archaeological profession, mitigation costs would likely be much greater today as following any systematic data recovery program, archaeological monitoring will be required to document and collect any significant archaeological remains or human remains, or features that may become exposed or intact, or previously disturbed archaeological deposits, are stripped."*

**(Technical Volume 14, pg.116, para 2)**

*"For large, complex sites, particularly those that may contain human remains, this approach can introduce an element of uncertainty and risk, as recently demonstrated on the Olympic Peninsula in Washington State. In this recent example, related to a US\$283-million overhaul of the Hood Canal Bridge, the US Army Corp of Engineers began construction of a dry dock and fabrication facility on a midden site. After 15 months and US\$86-million in expenditures, the project was terminated due, in large part to the large number of human remains that were recovered from the site (Vancouver Sun, 2004; MacDonald, 2006)(Technical Volume 14, pg. 114, para 4)*

*"In the Fall of 1991, Morley Eldridge and Tal Fisher completed a study to determine the extent of the waterlogged component of the St. Mungo Site. ... The results from this survey showed that the wet site component actually extended much farther than previously thought and that a large portion of the site was destroyed by the construction of the Alex Fraser Bridge..." (Technical Volume 14, pg. 44, para 2)*

## Calibration of Traffic Models

This Gateway report is full of jargon and undefined acronyms that render the report virtually incomprehensible, even for a skilled engineer. The diagrams do not even contain a key to assist the reader in understanding what is being shown. GEH is the method used to calculate data error that gives less variability than simply using percentage difference. The AM model data show gross errors for these zones that render the model inapplicable. While these zones have been chosen because they have high error rates (and so are biased selections), it is clear that the overall model is applicable to many other regions in the GVRD. There are numerous examples of accurate zonal predictions in the model for other areas, but clearly, there is an error bias on routes around Anniesville. Better traffic data and adjustment of model parameters in the Anniesville area are required, if the predictions about present and future Anniesville traffic flows is considered to be important criteria in designing this route.



Traffic models in other studies show considerably higher numbers for projected traffic

## Permits and Certificates

While we didn't have time to check all the permits and certificates necessary for the proponent to proceed with the application, we did notice that the engineer's reports were devoid of the required stamps and signatures. This would have serious repercussions in the private sector, and may still result in some form of disciplinary action. It should be noted that the Gateway documents were done very unprofessionally as a whole. Missing data, maps without legends or accuracy, tables that are mislabeled or erroneous, and conclusions based on incorrect or misleading information.

"A member or licensee receiving a seal or stamp under this section must use it, with signature and date, to seal or stamp estimates, specifications, reports, documents, plans or things that have been prepared and delivered by the member or licensee in the member's or licensee's professional capacity or that have been prepared and delivered under the member's or licensee's direct supervision."

( [www.qp.gov.bc.ca/statreg/stat/E/96116\\_01.htm](http://www.qp.gov.bc.ca/statreg/stat/E/96116_01.htm) )

## DeltaPort

While it is lumped in with the Gateway highways building program, the SFPR is actually a component of the DeltaPort expansion, which has more than a 30 concerned citizen groups condemning its environmental report, and the federal MP for the area calling for a public hearing. The Environmental review of the Third Berth expansion somehow passed certification and construction has already started. Once the Third Berth construction was safely underway, the Port announced it will proceed with the environmental assessment for its Terminal 2 expansion after all.

The position of the D.F.O and Environment Canada on the expansion of Delta Port at Roberts Bank has been very clear since the 1970s. The negative environmental impact on the Dungeness crab nursery, the eelgrass beds

Gateway 30 Network: [www.stopgateway.ca](http://www.stopgateway.ca)

**Federal MP John Cummins letters to Premier Gordon Campbell and to Federal MP David Emerson.**

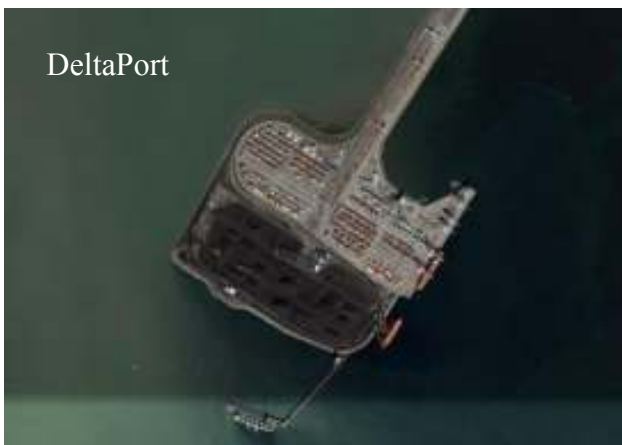
<http://www.sunburyneighbourhood.ca/SFPRLetters.htm>

*"From the point of view of estuarine ecology, the Panel has concluded that the potential impacts on the Fraser River estuary, of which Roberts Bank is part, are too great to recommend that the port expansion be approved as proposed. The extent and ecological significance of the Fraser River estuary, particularly its use by fish and wildlife, make it unique in North America. A major salmon fishery depends on its preservation as do hundreds of thousands of migratory birds."*

critical to the Great Blue Heron, hundreds of thousands of migratory birds, vital salmon habitat, and the feeding grounds of the three southern resident Orca pods would be devastating. [As recently as 2003, documents were sent to the DeltaPort officials reiterating this position and the sentiments of the people of British Columbia, by the D.F.O. and E.C.]

In spite of a DFO policy of 'No net loss', the proponent's own Comprehensive Study Review (CSR), found there would be a permanent loss of 22 hectares (220,000 square meters) of marine habitat and the displacement of over 3 dozen species at risk. This finding does not include the admitted impacts on our whale populations, nor the loss of ALR land needed to expand road and rail infrastructure. The CSR concludes that species will simply move away (to where, they don't say) during the start of construction and therefore not be impacted....what a load of rubbish! This is another example of the constant erosion of our wildlife habitat and ALR lands at the expense of the livability of the Lower Mainland.

Despite the direction from the Canadian Environmental Act to consider all aspects of a project together for environmental review, the proponent has separated all of the components into the smallest denominators including the different phases of the proposed expansions to DeltaPort thus, avoiding examination of the cumulative impacts of the expansion in its entirety.



**(In 2004 something happened, and the DFO decided to help the proponent to get around the process.)**

*"...It was also recommended to the Panel that the Roberts Bank project not be reviewed in isolation from other existing and proposed developments in the system and should be considered with these in an integrative, cumulative sense."*

Report of the Environmental Assessment Panel Roberts Bank Expansion March 1979

**Letters between DFO and VPA officials showing a rejection of DeltaPort expansion plans and then a deliberate circumventing of the Canadian Environmental Assessment Act rules.**

<http://www.sunburynighbourhood.ca/DFOLetters.htm>

**MLA Guy Gentner's Letter to the Premier**

[http://www.sunburynighbourhood.ca/PDF/Gentner2Premier\\_SFPR.pdf](http://www.sunburynighbourhood.ca/PDF/Gentner2Premier_SFPR.pdf)

**Delta Mayor Lois Jackson's letter to the Senate**

[www.sunburynighbourhood.ca/SenatePresentationMarch132007.htm](http://www.sunburynighbourhood.ca/SenatePresentationMarch132007.htm)



Lawyers for the DFO in Ottawa violated their mandate by manipulating the environmental assessment of proposed port expansion.

DFO lawyers advised the proponent, the Vancouver Port Authority (VPA), how to circumvent a proper cumulative effects study of the project which is required under federal legislation.

The DFO lawyers advised the VPA that if the planned second phase, "Terminal 2 (T2)", of the expansion were fully included in the cumulative effects study of the first phase, the project would need to be reviewed by an independent Review Panel.

To avoid this review, the lawyers recommended that the VPA write a letter to create uncertainty about the second phase even though studies and plans for the second phase were well underway.

The DFO lawyers even reviewed the letter and permitted the VPA to write the most important section of a report to the Minister of Environment! The section dealt with the critical issue of adverse environmental effects of the project. The report was supposed to have been authored by DFO and Environment Canada (EC) as Responsible Authorities managing adherence to the *Canadian Environmental Assessment Act (CEAA)*.

As a result of the DFO lawyers' interference in the process and collaboration with the VPA, the Minister of Environment decided on an internal study approach instead of the required independent Review Panel. The skewed process continues to be advanced by Ottawa despite documented concerns by federal scientists that the conclusions of the studies are based on flawed data.

It is outrageous that, in 2003, the Minister of DFO had advised the Vancouver Port Authority that his department would not issue permits for the project, would not authorize the destruction of critical fish habitat at the mouth of the Fraser River and, a year later, DFO lawyers were advising the VPA how to get around the system in order to get the permits.

**Port related air pollution will cause cancer and respiratory disease increases...see this short video.**  
[www.californiaconnected.org/tv/archives/498](http://www.californiaconnected.org/tv/archives/498)

## The Canadian Environmental Assessment Act

<http://laws.justice.gc.ca/en/C-15.2/>

**16.** (1) Every screening or comprehensive study of a project and every mediation or assessment by a review panel **shall include a consideration of the following factors:**

(a) the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project **in combination with other projects or activities that have been or will be carried out;**

**16.2** The results of a study of the environmental effects of possible future projects in a region, in which a federal authority participates, outside the scope of this Act, with other jurisdictions referred to in paragraph 12(5)(a), (c) or (d), may be taken into account in conducting an environmental assessment of a project in the region, particularly in **considering any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out.** 2003, c. 9, s. 8

### Necessary adjustments

**19. (7)** Where a responsible authority uses or permits the use of a class screening report to which paragraph (2)(b) applies, it shall ensure that any adjustments are made to the report that are necessary to **take into account local circumstances and any cumulative environmental effects that may result from the project in combination with other projects or activities that have been or will be carried out.**

*"Here is a draft letter from VPA explaining the likelihood of T2. I see your advice on whether this letter would provide sufficient rationale **to remove T2 from the cumulative effects assessment for Deltaport Third Berth Expansion Project, on the basis that it is hypothetical**, rather than certain or reasonably foreseeable. Also, DFO has advised VPA that, with such a letter, T2 could be removed from the scoping document without the need to go back for public consultation. Are you in agreement with this? Lisa"*  
**(Oct, 21, 2004 E-mail from Lisa Walls (Pyr) to Adam La Rusic, Sr. Environmental Engineer, Environmental Protection Branch, Environment Canada.)**



## The recently revealed Rail Marshalling Yard

It wasn't until January 2007 that the public learned about a rail marshalling yard planned for South Delta – and we only found out about it when one of the founding families in Delta was approached for their farmland.

The Guichon family, for which Port Guichon in Ladner was named, was told that they can either sell the family farm or it will be expropriated! 150 acres of prime agriculture land would be removed from the ALR and many more would become polluted by the diesel particulate and the ozone depletion for the proposed 17 track rail yard.



This additional impact to our heritage and A.L.R. lands is yet another example of what the Gateway project is planning for Delta and what the Transportation Ministry trying to do behind our backs.

All related projects should be considered together when judging the environmental impact. This is not just at the direction of the Environmental Assessment Act, but it is the intention of the people of Canada.

The Provincial government is ignoring these intentions. All components of the Gateway initiative have been separated to minimize their perceived impacts

A byproduct of the increased container trade is the number of empty containers that are stacking up throughout the Lower Mainland. Because 80% of containers come in and only 20% go out, we have to store the growing excess. No one wants the empty shells that pile up and rust into our landscape. Not even of value for salvage, they will become a permanent blight on our landscape.



Revealed, not through an open and honest Government statement, but by the opposition to expropriation by the (pioneer), Guichon family who own the Farmland.



Evidence of the growing trade imbalance that leaves empty containers to become part of Delta's landscape





## Evaluation of Alternatives

Alternatives that would reduce or eliminate most of the impacts threatened by the proposed SFPR have been put forward by community groups that have the support of Delta Council, Federal MPs, Provincial MLAs, and many business groups.

**The Hoover/Naas proposal** is by far the best scenario for the South Delta region. It allows for the efficient movement of goods and people, provides safer highways, eliminates the High Voltage lines debate and over 500,000 train whistles each year, while protecting our ALR lands, and Burns Bog. The Hoover/Naas proposal is a truck only route that would present a non stop direct path from DeltaPort to a scale and safety check yard that is at a crossroads of highways going North, South, East and West.

The Minister of Transportation and Gateway officials don't mention the ALR lands, Wildlife habitat, or over \$200 million dollars of savings this route provides; instead they claim that it handles only 10% of the traffic needs.

This erroneous comment does not take into account that heavy truck traffic is currently over 2000 trucks per day and projected to increase to 5000 trucks per day over the next 5 years, or that one semi-trailer is the equivalent length of three commuter cars and much less maneuverable thereby creating a difference of 35-40 % in immediate Highway 17 traffic reduction. As only trucks with manifests for Richmond would be allowed to travel west, the traffic on Highway 99 and through the Massey Tunnel would be reduced significantly.

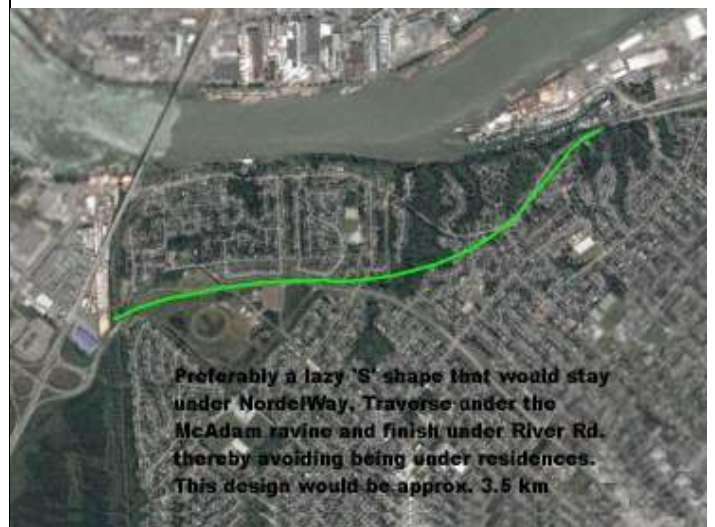
**If the rest of SFPR is to be built, then the solution for North Delta is a tunnel.** The Glacial till that makes up the headlands of the escarpment is excellent material for tunneling through according to tunnel building companies. A tunnel would not only preserve the eight ravines, which are red- and Blue-listed habitat with red-coded streams, and a wildlife corridor that connects to Burns Bog, but would have other major benefits. These benefits include the ability to control spills and filter exhaust, retain green spaces, preserve heritage sites, avoid archaeological disturbances, greatly reduce the need for expropriation, lessen disruption to existing communities and provide a straighter, more level route that will save time, energy and fuel costs.



**The Hoover/Naas Proposal**  
[www.thereisanotherway.com](http://www.thereisanotherway.com)



**The SFPR would pave this hillside with a two-tier 4-lane freeway at Gunderson Slough**



Ideally, a three bore tunnel with the rail in one, which would get the tracks off the foreshore of the Fraser River. The North Delta hillside above this section of track is well known for sloughing and instability. Moving the track into a tunnel would allow us to make a park that would include a bicycle/walking path that would connect the existing trail that runs from Tsawwassen, along Mud Bay and the eastern edge of the Bog, dead- ending under the Alex Fraser Bridge, to the trail at Brownsville by the Pattullo Bridge, up both sides of the Fraser River and joining the Trans Canada Trail.

Gateway's objections to a tunnel merely reflect their entrenched position—not the realities of the situation nor of modern tunnel technology:

- **Dangerous goods movement**

Less than 1% of the truck traffic is dangerous goods and most of that travels by rail along the shore of the already endangered Fraser River. Surely this small percentage of the truck traffic could continue to use alternate routes.

- **Ventilation**

Today's tunnels are built with directional fans with filters, air scrubbers and 'Cold Plasma technology' that actually improve the air quality for that section of roadway.

- **Environmental spills**

Tunnels have a sump system to catch and contain roadway runoff. An open highway along the banks of sensitive creeks and the already imperiled Fraser River would constantly pollute the waterways with routine runoff. A major spill could be catastrophic.

- **Fire**

Modern tunnels have fire curtains and sprinkler systems that isolate and extinguish fires, plus they have automatic high-speed ventilation systems to clear the air and draw flames and smoke straight up toward the sprinklers to prevent spread.

- **Safety**

Tunnels have constant lighting, road and weather conditions making it safer for the drivers. Also, drivers are more careful in tunnels and pay better attention.

- **Costs**

Operation and maintenance costs would be off-set by a straighter, more level alignment that would realize savings in time and fuel costs. One of Gateway's project goals and a major reason that the Government is spending all this tax money is to save the cost of traffic congestion. Gateway's tunnel cost estimates have risen over the past 4 years to between \$500 and \$860 million for a tunnel where the same section of highway they say



Click for full-size Map

<<http://www.sunburyneighbourhood.ca/Maps/totalviewwithextended.JPG>>



“It is frequently discussed whether tunnel sections should perhaps be basically assessed as more dangerous than open roads. Far-reaching analyses by Lemke of the Ruhr University of Bochum, Institute for Road and Traffic Studies provide a clear picture for roads as such. **It is shown that the accident risk on the open road is generally far higher than the risk in a tunnel.**”

Excerpt from a paper by Professor Alfred Haack of the German research Association for underground Transportation, STUVA. One of most highly respected international authorities on tunnel safety.

Similar conclusions were reached by the United Nations Economic Commission and the Organization for Economic co-operation and Development.

would be \$188 million. On the contrary, our estimates, based on research of other world tunnels and confirmed by tunnel-building experts is \$400 to \$500 million for a state-of-the-art tunnel, but our costs estimate of a highway along the North Delta Bluffs is staggering.

- Construction costs
- Expropriation costs
- Archaeological mitigation
- Noise mitigation costs
- Increased health care costs
- Loss of tax revenue
- Decreased property values
- Compensation for lost critical habitat for threatened and endangered species – Impossible!
- Many other costs, both direct and indirect...staggering!

Gateway has not included in its cost analysis for their river-side highway any retaining walls, noise mitigation costs, or proper compensation for the wildlife habitat that would be lost. They also do not include lost property values, or the admitted health care costs that would result from the pollution.

The complexities that are involved with the unstable clay banks that make up the surface of the bluffs have not been properly addressed. Along this section, the SFPR is exposed to the risk of mudslides.

They do say that jobs would be created in the health care sector because of the impact on our air quality, but they fail to add-in the government money necessary to pay for these jobs.

Gateway summarizes their impact analysis by stating that while the tunnel would preserve property values, green space and wildlife interests and heritage sites, the highway would provide better views for the drivers! The true cost and impacts of the entire Gateway initiative are being hidden from the public, and questions brought forward by the public are responded to with delay tactics, misleading documentation and outright lies.

Major cities around the world are removing highways from their waterfronts because of the value of this land to the livability of a region.

- **Portland's** Waterfront Park, built on what was once a major roadway along the Willamette River, is now one of Oregon's top attractions.
- **Paris** is reclaiming the north bank of the Seine by progressively closing an urban motorway.
- **Seoul** is proposing to remove a six-lane highway and replace it with a riverscape.
- **Milwaukee** recently converted a segment of its Park East Freeway into a boulevard, removing a major



**The rest of the World is tunneling because they realize the value of land. Highway tunnel projects are being built in just about every major country right now including Canada, with Norway leading the charge with over 25 road projects on the go.**

See [www.tunnelbuilder.com](http://www.tunnelbuilder.com)

*"...the analysis concluded that a highway tunnel through North Delta as compared to the current SFPR alignment would have less impact on residential properties, heritage sites, riverfront green space, and visual effects for residents along River Road and alternate modes of travel. **The analysis also concluded that the SFPR surface route would provide better views for drivers over the river than the North Delta tunnel proposal**"*

**Gateway's 'Sunbury Memo' pg. 3, paragraph 1.**  
<[www.th.gov.bc.ca/gateway/reports/SFPR/Sunbury\\_Memo.pdf](http://www.th.gov.bc.ca/gateway/reports/SFPR/Sunbury_Memo.pdf)>



source of urban blight and opening access to the Milwaukee River.

- **Washington, D.C.**, proposes to raze the Whitehurst Freeway to create similar improvements. **Georgetown, Cleveland** and **Buffalo** are considering doing the same.
- **San Francisco's** Embarcadero Freeway, also a double-decker elevated structure, which was removed from the San Francisco waterfront after it was severely damaged in the 1989 Loma Prieta earthquake. . As a result of the earthquake, citizens campaigned to revitalize the area by reconnecting the city to the Bay and the pedestrians to the waterfront. Now without an elevated freeway, San Francisco replaced it with a pedestrian-oriented boulevard that carries fewer cars, but attracts more people.

**A better option than the SFPR is the #10 Highway Alternative, also known as ‘the Surrey Diagonal’.**

It was, (and still is) the preferred route by most people’s thinking. For umpteen years, we have built our homes and our schools with the notion that #10 Highway would be the route of choice for truck traffic from DeltaPort to the #1 or to Highway #15 to the U.S.

A straighter and more direct route to Highway #1 and the newly proposed Golden Ears Bridge at 200<sup>th</sup>, the only node that would be not on the route would be the Fraser Docks. Since they have lost 75% of their business due to the newer, larger container ships not able to pass over the Massey Tunnel, the demand for this access is not as great as it once was.

Tilbury and Sunbury Industrial areas can easily be accessed from Highway #91 and #99.

Upgrading Highway #10 with extra lanes to accommodate the trucks would be the cheapest, simplest and most effective option.

Another possibility is a truck only route that would extend the Hoover/Naas along the existing rail lines to Hwy #15.

Either of these would be straighter and faster to Hwy #1 and Hwy #15 and would avoid Burns Bog and the Fraser River Bank while removing far less land from the ALR.



The community is fighting to preserve these bluffs to maintain a connection to the river and the vegetation corridor used by the hundreds of birds and animals that live and migrate along them.



**Click for full-sized Map**

**<<http://www.sunburyneighbourhood.ca/Maps/DeltaWithAlternativesWithShoreline.JPG>>**

**The Tourism and Business impacts** resulting from the planned Expansion of DeltaPort and the SFPR would be crippling for Delta. Tourism in Canada creates Millions of economic dollars each year and Delta has the potential to receive an enormous percentage of this economic boom because of our assets and our global position.

We have more resources than most other communities in British Columbia when it comes to tourism, and with the rising costs of fuel, people will be looking for rest and relaxation closer to home.

Situated between two U.S. border crossings and part of the largest metropolitan area in Western Canada, we enjoy an abundance of resources that are the envy of the world.

Vast areas of clean air and green spaces, with pathways for walking and cycling along forested trails and dykes meandering around the most significant migratory bird flyway on Earth. The Fraser River Estuary that is home to the largest salmon river on the planet as well as many species that are rare and threatened, including the Sandhill Crane, Snowy owl, Pacific Orca, as well as Bald Eagles that are rare elsewhere in the world, but gather in the hundreds in and around Burns Bog.

There is the huge volume of tourists that pass through Delta on their way to and from the island via the Tsawwassen Ferry terminal. Tourists that may be interested in the heritage towns of Ladner and Sunbury/Annieville or the 8,500 years of archaeology that has been showcased at two world fairs. We already know of the international interest in Burns Bog, the largest of the only two raised bogs in the western northern hemisphere, and Canada's only home to several species at risk including a new species of Vole that was recently discovered and highlighted in the latest edition of 'Mammalian Biology'.

The Bog along with the Delta foreshore from the Serpentine Fen, around Mud Bay, Tsawwassen, Ladner Marsh, Westham Island's Reifel bird sanctuary, Canoe Pass, Deas slough, and along the banks of the Fraser river past the upland forests and ravines of the North Delta bluffs, to Gunderson slough, provide a birders paradise that boasts the richest bird populations in the province with well over 300 species including several that are very rare.

Gunderson Slough also has a huge potential for a community park and seaside walk to compliment the natural beauty and charm of a sheltered inlet with the Salmon boats that sell a variety of fresh fish.

In the midst of our waterfront peninsula is some of the most fertile farmland in the country that produces an abundance of milk, corn, blueberries, cranberries, vegetables and Pumpkins!

All of this is in danger of becoming paved over, polluted and passed by with the current plans.

The SFPR would act as a bypass for Delta that would take the tourists through, rather than to, our resources. Combined with DeltaPort, the pollution from the increased freighter, train, and truck traffic would compromise our air quality, and affect the quality and production of the crops from our farmland. Habitat loss would severely impact the number of species that inhabit Delta and in turn reduce the draw to birders which are generally the retired set that represents the largest amount of disposable tourist income. This same group would be interested in our archaeology, as are school and university groups and academics from around the world. This interest would assist our First Nations in promoting their cultural assets which are recognized the world over.

Properly protected and promoted, Delta's tourism is worth Billions

Help maintain the livability of the Lower Mainland by protecting the Agricultural Land Reserve, Burns Bog the wildlife habitat of the North Delta bluffs and the vital Fraser Estuary. There are alternatives that would protect these resources and still provide for the movement of goods and commuters.

Please tell the Minister of Transportation that the constant erosion of the things that make the Lower Mainland and Delta one of the best places in the world will not be tolerated. Protection strategies for our air quality, our Wildlife habitat, our many threatened and endangered species, our farmland and our livability, were not put in place to be simply ignored by this Government.

Respectfully submitted,

Don Hunt  
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604 582-9228