

Protecting the National Economy by Managing the Lower Fraser River

The Lower Fraser River is crucially important to the 2.7 million people of the Fraser Valley and Metropolitan Vancouver, and is one of the prime economic generators in B.C., and a significant contributor to the national economy. Port activity on the Lower Fraser River rivals Canadian traffic on the St. Lawrence Seaway as well as supporting a myriad of other economic activities vital to the region and beyond.

Port Metro Vancouver (PMV) is not only the largest port in Canada, but the largest port by tonnage in North America, and is the principal ocean gateway to the Asia Pacific. Although the Lower Mainland ports were amalgamated in 2008, if the Lower Fraser River port existed as a stand-alone port, it would still be a significant port for Canada. Prior to the amalgamation, the Fraser River Port Authority was the third largest port in Canada, based on domestic, export and import tonnage. The impact of the port function of the Lower Fraser is comparable in importance to the impact of Canadian traffic on the St. Lawrence Seaway both, in terms of tonnages and employment:

		<u>Lower Fraser River*</u>	<u>St. Lawrence**</u>
Cargo	(Million Tonnes)	25.7	36.5
Jobs	(FTE's)	52,900	63,000
Wages	(\$ Billions)	\$2.62	\$2.88

* The Lower Fraser River impact shown above is for 2008, prior to the amalgamation of the three Regional Port Authorities into Port Metro Vancouver in that year; the St. Lawrence Seaway impact is for 2010

** St. Lawrence data covers Canadian cargo carried on the Montreal - Lake Ontario section of the Seaway and the Welland Canal between Lake Ontario and Lake Erie

Looking to the future, given that the majority of developable port lands to accommodate PMV expected growth are on the Fraser River, the Lower Fraser River is destined to play an increasingly important role in overall port activity and future growth of the Canadian economy.

In addition to the integral role to the operations of PMV, there are nine federal government Small Craft Harbours located on the Lower Fraser River. Supporting the commercial fishing industry, these Small Craft Harbours support a variety of fishing, aquaculture, recreation, tourism, shipping and other marine activities. The Fraser River also supports other key industries: The Fraser Valley's agriculture production in 2011 was \$1.6 billion (the majority of agriculture output for B.C.), and approximately 47 forest industry facilities operate in and along the River.

The Risk

The positive economic growth and development of the region seems unstoppable. However the security of much of the agriculture and industrial lands, as well as the road and rail infrastructure that connects Canada to the port, are vulnerable to flooding and earthquakes.

Each year during the spring freshet, approximately 32 million m³ of sediment is transported by the River, with roughly 10 per cent of this material settling in the navigation channels of the lower reaches. To ensure continued navigation and flood prevention, regular maintenance dredging is required. Dredging increases flow capacity which is a crucial flood prevention measure to keep the river below dyke levels during periods of increased flow.

In 2007 the River came perilously close to overtopping the dykes in the Fraser Valley during the spring freshet. If the dykes had been breached, the national rail lines and the TransCanada Highway, connecting Vancouver to the rest of Canada would have been cut off, choking off the movement of goods in and out of the busiest port in the country, resulting in significant economic losses.

Presently, the adjacent lands of the Lower Fraser River are home to over 50% of British Columbia's population, and in the actual flood plain, \$50 billion dollars' worth of development, which are increasingly vulnerable to frequent extreme weather events that are projected to impact the River.

Ensuring Future Prosperity

According to recent studies, sea levels at the mouth of the River could rise in excess of one metre by the end of this century. In order to protect the businesses and livelihoods of those dependent on the river, residents and public facilities (including the highway and rail transportation infrastructure), an ongoing, coordinated program of

investment in improved diking, dredging and other protective features is imperative. Preliminary estimates place the cost of this program required by 2100 at nearly \$9 billion for the tidal areas of the River and adjacent coastal reaches.

The impact of inaction could be severe. The economic damage of losing one or more of the rail links to the port, as well as the major highways through the valley would be significant to the national economy. Damage could be similar to that seen in New Orleans, and require lengthy reconstruction periods, likely costing in the billions of dollars, combined with billions in lost economic activity. In order to mitigate this potential, we must act with some urgency to ensure the appropriate preparations are made.

In addition to environmental challenges, urban growth is also putting pressure on the future prosperity of the region. The demand for residential land has applied tremendous pressure on industrial land that is in transition. As a result, this land in transition has been converted to residential use, resulting in a loss of nearly 3000 hectares of industrial land in the last 30 years alone.

Coordinating the Administrative Challenge

Ultimately, the Fraser River is the backbone of transportation for the Asia Pacific Gateway and is of great economic value to all of Canada. It has the ability to provide a significant competitive advantage that will build our nation's economic prosperity as Asia becomes an increasingly important trading partner. Streamlining and facilitating a process that allows a main transportation channel to be maintained will be primary in developing this key opportunity.

One of the main challenges to managing the Lower Fraser River is coordinating the many government and non-government stakeholders that maintain the River. There are currently 15 municipal governments and 29 first nations groups along the banks of the Lower Fraser. There are also over 20 Provincial and Federal ministries involved in the River's administration resulting in a myriad of legislative acts and bylaws that require due process.

As authority and oversight is vested with a multitude of government departments, work on the Fraser River is often done in isolation and not part of a comprehensive and coordinated plan to address ongoing maintenance and safety requirements.

Resolving these issues will require long-term management and funding with substantial financial obligations. Compounding the problem is the fragmentation which requires compromise among various jurisdictions and authorities.

All levels of government and other key stakeholders must come together to manage the Lower Fraser River as an interconnected system in which the interests of the economy, the population, navigation, public safety, and the natural environment are managed holistically as one system. This will require the leadership of the Federal Government, the ultimate authority over the River.

Recommendation

To ensure the continuous flow of commerce to and from the Asia-Pacific market, and to ensure the sustainability of the Lower Fraser River, the federal government work with the provinces, municipalities, aboriginal groups, and business stakeholders to:

1. Bring together a task group of relevant stakeholders, to develop a holistic strategy to address the long term funding and management requirements necessary to maintain, protect and further improve the Lower Fraser River.
2. Charge this task group with responsibility for developing a comprehensive plan, addressing but not limited to, flood protection, navigation management, sea level rise, and agriculture and industrial land enhancement, within the lower Fraser River and ensure the plan includes consideration for the role that the Fraser River can play in further development of the Asia Pacific Gateway strategy.