



VILLAGE OF BELCARRA

"Between Forest and Sea"

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August 29, 2013.

Kinder Morgan Canada
2844 Bainbridge Avenue
P.O. Box 84028
Burnaby, BC, V5A 4T9

Attention: Margaret Mears, Environmental Lead, TMEP

Dear Ms. Mears,

Re: Burrard Inlet Marine Environment

This has reference to your July 25th response to Belcarra Council's letter of June 26th regarding the study of the marine environment in the vicinity of the *Westridge Marine Terminal* (WMT). While you provided some general information, your letter did not reflect a demonstrable understanding of the unique aspects of the Burrard Inlet marine environment that needs to be identified and understood as a prerequisite to assessing the potential effects that could result from KMC's pipeline expansion project. Below are a few examples which KMC needs to consider:

Rockfish Conservation

Is KMC aware that the WMT lies within eastern Burrard Inlet rockfish conservation subarea 28-11 (west of 122° 57.000' W) established by DFO to protect BC's rockfish and alleviate further rockfish population declines? Has KMC done rockfish population counts within the study area? Is KMC aware that *Port Metro Vancouver* has an artificial reef immediately north of WMT at Cates Park? Inshore rockfish live on rocky reefs and do not swim far from their home reef.

New Species

Is KMC aware that in February 2012, retired DFO biologist and author [Rick Harbo](#) and marine conservation diver/photographer [Neil McDaniels](#) discovered a new species to Canadian waters? The divers were on board the [Reed Point Marine Education Centre](#) boat 'Medusa 2' sampling host horse clams a mere 3 km east of WMT and found [Odostomia](#) snails. An international molluscan expert, [Pat Lafollette](#) at the LA County Museum, confirmed their identification. How many other rare or undiscovered species are present in Burrard Inlet? We don't know! These rare snails were discovered while [Reed Point Marina](#) was doing their "due diligence"; that is, doing what they are supposed to do and ensuring detailed study when considering a marina extension into nearby habitat. A discovery such as this does not mean that the WMT expansion should not proceed. Rather, it emphasizes the importance of thorough study and understanding of the potential effects of the expansion.

Unique Discovery

Is KMC aware that the world's largest sea star was discovered in Burrard Inlet in 2006? A photograph of the record-sized sea star from the Burrard Inlet study area is on a *Port Metro Vancouver* publication. The giant pink sea star was 99 cm in diameter, and was discovered while educators [Ruth Foster](#) and [Rod MacVicar](#) were doing a "marine life of the harbour" field trip with a grade 5 class. Subsequently, SFU biologist [Dr. Isabelle Cote](#) and her research scuba diving class made another astonishing discovery. In the same clam bed at Reed Point, Dr. Cote and her students encountered a population of giant pink sea stars, many of which were found to be 25% larger than the largest recorded individuals of this species. What does this tell us about the unique aquatic habitat of Burrard Inlet?

Undocumented Species

Is KMC aware of the presence of a snailfish — a relative of the Spiny Lump sucker — another local discovery found at the *Mossom Creek Hatchery's* sea pen at loco? This as yet undocumented and un-named species of snailfish illustrates that the knowledge of Pacific Northwest marine fish is still far from complete.

Squid Spawn

Is KMC aware that for the first time in many years there has been a spawn of squid in eastern Burrard Inlet? These fast growing molluscs are a significant food fish for salmon, and little is known about their presence and habitat requirements.

Herring Spawn

Is KMC aware that the eastern portion of Burrard Inlet is experiencing a return of the herring spawn? This spawn is only one or two recorded June herring spawns in over 100 years, and is most likely related to the late spawning Cherry Point stocks in Washington State. It is just these past three years that the herring are getting established in the eastern portion of Burrard Inlet, and measures to protect this small stock need to be established.

Eelgrass Beds

Is KMC aware that that there are eelgrass beds located throughout the Burrard inlet study area? Has KMC located and documented (mapped) the eelgrass beds within the study area? Eelgrass habitats are among the most productive and biologically diverse ecosystems on the planet, and provide habitat for numerous invertebrates such as Dungeness and red rock crabs, sea stars, clams, snails, anemones, and tiny crustaceans. Many fish spend a portion of their life cycle in eelgrass meadows including juvenile salmon, adult herring, pipe fish, stickleback, and many more. Eelgrass meadows are important spawning grounds for herring, which in turn are a major food source for adult salmon.

Invasive Species

Is KMC aware that at nearby *Reed Point Marina* UBC graduate student Nora Brown has set-up mesocosms (experimental water enclosures) to study the invasive star tunicate? This invasive marine species has arrived as a “hitchhiker” on commercial shipping or products, and is a threat to BC’s shellfish industry and native bivalves. More needs to be known about local marine ecosystems to understand what effect a ten-fold increase in tanker traffic will have on the aquatic environment of eastern Burrard Inlet or importation of non-native species.

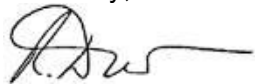
Research Station

Is KMC aware that UBC’s *Open Water Steller Sea Lion Research Station*, located at *Reed Point Marina*, is unique in the world and is saving a threatened species of sea lion? This research station has been operating continuously for ten years, and an oil spill or even a sheen of oil on the water would shut-down this important research. On-going vigilance regarding water quality by the communities and industries surrounding the Burrard Inlet study area is essential to sustaining this and other such research.

Kinder Morgan Canada should be working with, and supporting, the local educational and research communities to ensure a thorough knowledge and understanding of the unique aspects of the Burrard Inlet marine environment. As stated in Belcarra Council’s letter of June 26th, emergency preparedness is founded on knowledge and understanding.

A comprehensive response to the foregoing would be appreciated by all of the communities located around Burrard Inlet.

Sincerely,



Ralph Drew, Mayor
Village of Belcarra

RED/

cc: Ian Anderson, President, Kinder Morgan Canada
Greg Toth, Senior Project Director, TMEP, Kinder Morgan Canada
Mike Davies, Director, Marine Development, Kinder Morgan Canada
Lexa Hobenshield, Manager, External Relations, Kinder Morgan Canada
Robin Silvester, President and CEO, Port Metro Vancouver
Darrell Desjardin, Director, Sustainable Development, Port Metro Vancouver
Laura Strand, Manager, Aboriginal Affairs, Port Metro Vancouver
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Environment and Parks Committee, Metro Vancouver
Burrard Inlet Mayors and Councils