

# Wilderness Tourism Association



BRITISH COLUMBIA | CANADA

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August 30, 2012

Joint Review Panel  
Enbridge Northern Gateway Project  
444 Seventh Avenue S.W.  
Calgary, AB T2P 0X8

Dear Joint Review Panel

## **Re: written statement regarding the Enbridge Northern Gateway Project**

Please accept this letter as the Wilderness Tourism Association of British Columbia's written statement about the Enbridge Northern Gateway Project. As an industry sector that relies on wildlife and pristine environments for its livelihood the recommendations and decisions pertaining to the development of this pipeline project in British Columbia are of key interest to us.

It is critical that your panel considers the socio-economic activities such as tourism and recreation that will be damaged in the event of an oil spill. Simply put, the Wilderness Tourism Association (WTA) and the approximately 2000 tourism businesses in British Columbia that we represent believe this project threatens our tourism industry. There will be spills along the pipeline and tanker routes. This is acknowledged by Enbridge. With this in mind, we have examined studies carried out by Enbridge and others of the probable frequency and consequences of spills. We have concluded that the risks to our businesses and our whole industry are unacceptably high and are writing to oppose the Enbridge Northern Gateway Project (NGP) as it is currently proposed. While our individual members have a variety of reasons for opposing this project, most of the concerns and comments in our statement relate to the risks to the tourism industry from a NGP spill. Our comments relate to both the pipeline and the associated shipping along the B.C. Coast via bulk oil tankers.

## **Wilderness Tourism in British Columbia:**

The Wilderness Tourism Association of BC (WTA) works to ensure a sustainable future for wilderness tourism (also known as nature-based tourism or adventure tourism) in B.C. We represent the hundreds of small businesses that offer nature-based tourism activities and experiences throughout British Columbia. These businesses contribute significantly to BC's economy by offering world class travel experiences. They include operators who have won prestigious international travel awards and other recognition. A significant number of these businesses operate along the proposed pipeline and tanker routes and would be directly

**“Ensuring a sustainable future for BC's wilderness tourism industry through leadership, advocacy, and stewardship.”**

affected by a spill. These operations provide long-term, stable, diversified revenue streams and jobs for B.C. communities. They have established positive working relationships with local First Nations communities, employ skilled First Nations workers, and support their communities and traditional territories.

British Columbia is marketed world wide as being "*Super, Natural*" and over many years the province and industry have invested hundreds of millions of dollars in this brand. This is the reason most people visit British Columbia. While only a fraction of visitors to BC may actually see killer whales, sea otters, and grizzly bears in unspoiled wilderness our reputation for unspoiled nature is an integral part of their decision to visit British Columbia rather than other international destinations. Wildlife, scenery, and a pristine environment are BC's advantage in a very competitive international tourism market.

Likewise, many tourism businesses in British Columbia depend directly on the environment for their tourism activities. Fishing lodges, guide outfitters, and backcountry adventure lodges (skiing, mountain biking, trail riding, etc.), to name a few, all depend on a healthy, natural, and pristine environment. They need healthy and productive fish and wildlife habitats, wilderness landscapes, and spectacular scenery. Hotels, restaurants and other tourism services, even in urban areas, derive a large portion of their income from visitors attracted by the wildlife, natural beauty and associated attractions unique to British Columbia. It is for this reason that the WTA has put significant resources towards the protection and stewardship of B.C.'s environment including the establishment and ongoing management of B.C.'s Great Bear Rainforest in order to help protect a nature-based tourism industry on the coast.

Relatively few tourism operations in BC would be untouched by an oil spill in the province, whether along the pipeline route or from a tanker on the coast. A spill would do its greatest damage to businesses located and operating in the affected area, but all of B.C.'s tourism industry would suffer from the tarnishing of our "*Super, Natural*" image. Our customers don't just spend their time and money at that specific business say on the Central Coast or in the Bulkley Valley. The time our customers spend at a wilderness destination is often just a part of their overall travels to, or through British Columbia. On average customers will spend more time and money in other locations of B.C. such as Vancouver, Whistler, and Victoria. However, without the draw of that activity or experience (whether fishing for steelhead or viewing a grizzly bear) to anchor their trip they would very likely not visit British Columbia at all.

Tourism contributes significantly to our local communities and the overall provincial economy. Nature based tourism alone generates \$1.6 billion for B.C. and approximately 25,000 jobs. It is also a major driver of BC's \$13 billion plus tourism industry, an industry that generates over 125,000 direct jobs. A significant number of BC's tourism businesses primarily export their product; in many cases 50% of their customers reside outside Canada. Our international reputation for wilderness and nature, supported by our *Super, Natural British Columbia* brand, draws tourists to British Columbia. Many British Columbians also spend their vacation dollars at home, exploring their own province.

## The Enbridge Northern Gateway Proposal:

The proposed 1,176 km pipeline from Bruderheim Alberta to Kitimat would cross 1,500 watercourses including at least 600 fish-bearing streams in British Columbia. The project would cross through some of B.C.'s most important salmon habitats in the upper Fraser, Skeena, and Kitimat watersheds. Much of the terrain through northern B.C., where the pipeline route is proposed, is considered unstable and has a high potential to rupture the proposed pipeline. At Kitimat the oil product will be loaded on bulk tankers that will traverse some of the most dangerous coastline in the world.

It is our understanding that the pipeline would transport conventional and synthetic oil, and over time an increasing amount of bitumen. The bitumen would be diluted with a light hydrocarbon or condensate, the combined product being generally referred to as diluted bitumen or DilBit (the product usually contains a mix of 35% condensate and 65% bitumen). The pipeline is designed for an average throughput capacity of 83,400 m<sup>3</sup> (525,000 barrels) per day of oil products. The condensate pipeline has a daily throughput capacity of 30,700 m<sup>3</sup> (193,000) barrels and would run parallel to the oil pipeline. The imported condensate would be used to dilute the bitumen shipped from the oil sands.<sup>1</sup>

As shown by the accident at the Kalamazoo River in Michigan, the bitumen product is very difficult to clean up. When a spill occurs from a pipeline or from a tanker the condensate evaporates to form a poisonous cloud. The bitumen, being heavier than freshwater, will sink in the streams and rivers. In the salt water it sinks to a point in the water column where it reaches the density of the salt water making it impossible to contain near the surface. It will be carried by the tides and currents coating the bottom and the various beaches it encounters. These products are proven to be toxic to fish and other wildlife at low concentrations. We also understand that the risk of pipeline failure or rupture is increased with diluted bitumen pipelines due to rapid corrosion and difficulties of leak detection.<sup>2</sup>

The implications of a pipeline rupture and subsequent clean-up efforts to stream and river processes, fish and fish habitat would be insurmountable. These streams and rivers have wide floodplains and wetlands that comprise the core spawning and rearing habitat for some of B.C.'s key fish populations including chinook, sockeye, coho, chum and pink salmon, steelhead, rainbow trout and blue-listed bull trout. A pipeline rupture would spread hydrocarbons throughout the river systems contaminating spawning gravels, log jams, side channels and shoreline areas that comprise key fish habitats for extended periods.<sup>3</sup> The more volatile fractions of the oil would be immediately toxic to fish and developing eggs. The heavier

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<sup>1</sup> References to Enbridge documents and information in this report refer to its Northern Gateway Project application submitted to the National Energy Board for review.

<sup>2</sup> Swift, A., N. Lemphers, S. Casey-Lefkowitz, K. Terhune, and D. Droitsch. 2011. Pipeline and Tanker Trouble. The impact to British Columbia's Communities, Rivers and Pacific Coastline from Tar Sands Oil Transport. Prepared by Natural Resources Defense Council, Pembina Institute, and Living Oceans Society.

<sup>3</sup> Bustard, A. and M. Myles. 2012. Potential Effects of an Oil Pipeline Rupture on Reach 2 of Morice River. Submission to the Joint Review Panel, Enbridge Northern Gateway Project, by Northwest Institute for Bioregional Research.

bitumen components would slowly release polycyclic aromatic hydrocarbons (PAHs) that would have chronic effects on salmon egg development and juveniles rearing in these habitats for many years.

According to Enbridge's 2010 application, the volume of oil in the pipeline is sufficiently large that, even if the valves were closed immediately at the time of rupture, a significantly large volume of oil could drain into the environment. The ability to promptly respond to a pipeline rupture would be hindered by the remoteness of the areas and poor access. Many of the rivers would be covered in ice and snow during the winter or carry high sediment loads during spring run-off. These factors, along with the tendency for bitumen to sink and move into sediments on the river bed or banks, would make it almost impossible to contain or recover bitumen once it has entered the river. Remedial actions that might be taken following a spill, such as collecting oil-covered debris and sediments and removal to decontamination sites, or burning oiled debris on gravel bars, could cause long-term habitat impacts.

At the present time, there do not appear to be any proven techniques for effectively mitigating these impacts and river habitat could be threatened for decades. As demonstrated by the Enbridge pipeline spill in the Kalamazoo River in July 2010, it is near impossible to clean up a bitumen spill with conventional cleanup methods. Although Enbridge has spent \$800 million to date on the Kalamazoo clean-up effort, the company has only 'cleaned up' the main waterways of the Kalamazoo River, but not the surrounding wetlands and associated habitats.

In regards to the coast portion of this project, the port of Kitimat is by all accounts the riskiest port through which to ship oil on B.C.'s pacific Coast.<sup>4</sup> The risk of spills on the coast is directly proportional to the length of time spent by a tanker in the 'exposed area', which is determined by the area between the export terminal and the open ocean. The risk exposure for transport from the Kitimat terminal via the Northern Route is 16 hours.

Enbridge estimates that there will be a tanker incident once in 79 years, or a 48% chance of an incident in the 50 year life of the project (or once in 15,000 years for a major spill). However, it is our opinion that these estimates are neither credible nor relevant as they are based on data of tanker incidents vs. all tanker time at sea, including time in open ocean. A history of incidents in the area indicates five significant incidents in the last 65 years. Enbridge's estimates are based on their projected number of oil tanker vessels departing Kitimat being 220 per year. Enbridge's analysis does not include the proposed LNG export vessels departing Kitimat, which is a further 432 vessels at full capacity. This increases the risk of a tanker traffic incident and associated spills considerably.

A group of independent engineers, who have analyzed the incident frequency by using bridge/ship collision models and allowed for the proposed LNG tanker traffic estimate that a tanker incident is more likely to occur once in 38 years or a 73% chance of a spill in the 50 year operating life of the project.<sup>5</sup> A Raincoast Conservation Foundation report, which reviewed

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<sup>4</sup> Foschi, R., B. Sexsmith, and B. Gunn. 2012. Evaluation of Tanker Risks Associated With the Safety of the Northern Gateway Pipeline Project. Submission to the Joint Review Panel, Enbridge Northern Gateway Project, by the authors.

<sup>5</sup> Ibid

recent oil spills from large oil export terminals, concluded the spill frequency for Kitimat tankers carrying Enbridge oil will be 1 in 6.4 years or 99% chance in the 50 year life of the project.<sup>6</sup> Whichever number is correct, an oil spill from a tanker incident is a near certainty. Even Enbridge's unrealistically low estimate of the risk is unacceptable given the nature of the diluted bitumen product and the fact that it cannot be cleaned up. The damage from such a spill would be catastrophic to the wildlife, the environment, and the communities in the area and along the coast as tides and winds would spread the oil much further than what Enbridge's consultants state. In addition to spills in the channels and waterways of the Kitimat route there is the danger of a significant spill in Hecate Strait which is known for bad weather and accidents. Such a spill would, in addition to affecting the west coast of the mainland, also impact Haida Gwaii.

"Industry best practices" as put forth by Enbridge, CAPP, and shipping associations cannot and will not eliminate the chances of a spill. One just has to look at the BC Ferry that sank off Gill Island or the recent Costa Concordia accident in Italy to understand that human error can quickly lead to disaster despite whatever industry best practices are in place. Even minor equipment failures can quickly lead to accidents - e.g. the BC Ferry that crashed at Horseshoe Bay a few years ago due to a faulty cotter pin. Imagine what could happen if a similar equipment failure occurred during severe weather just as a loaded tanker exited Douglas Channel and had Gill Island lying directly ahead.

In the event of a spill Enbridge's own best estimate for initial spill response teams to be on the scene is 6 to 12 hours. How much oil will be spilled and how much irreparable damage caused within these initial hours? Enbridge's General Oil Spill Response Plan includes using mechanical response methods (e.g. booms and skimmers) for oil collection activities in the event of a spill in the ocean. The weather on B.C.'s north and central coasts make clean up operations of this nature impossible about 30% of the time because of wave height.<sup>7</sup> Even in best case circumstances marine based oil spill recovery is usually only 10 to 15% of the total spilled. Even 23 years after the Exxon Valdez spill there is oil on the beaches of Prince William Sound. As shown by the accident at the Kalamazoo River, the bitumen product being carried by the tankers is very difficult to clean up.

### **Effect of Northern Gateway Project on Wilderness Tourism in British Columbia:**

Any significant spill along the proposed pipeline route or tanker route will have an immediate and catastrophic impact to the tourism industry by harming wildlife that tourism businesses rely on for fishing, hunting, or viewing, or fouling beaches that are used for camping and visiting, or fouling the waterways used to experience B.C., as well as by the negative publicity created for the industry in the province. Wildlife is key to our growing sustainable tourism industry and the loss of wildlife from an oil spill would be a major blow to B.C.'s tourism industry. Bears, seabirds, fish, whales and other marine and land mammals are a major draw to the area. B.C.'s

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<sup>6</sup> Raincoast Conservation Foundation, 2012

<sup>7</sup> Analysis was based on mechanical response limits proposed by Nuka Research and Planning Group, LLC (Nuka Research, 2007) compared to wave height observations from weather buoys located in the proposed marine operating area.

Great Bear Rainforest, bisected by the proposed tanker route, is home to the rare white spirit bear, black bears, grizzly bears, humpback and fin whales, killer whales, dolphins, millions of seabirds, and some fish-eating coastal wolves. Our businesses rely on these animals, and these animals rely on a healthy environment for survival.

There are no studies of the economic value of wildlife to tourism in B.C. and what the impact might be from wildlife loss due to an oil spill. However, we can point to studies done in the USA. For example, the loss of wildlife found within the first week after Alaska's Exxon Valdez spill was valued at \$218 million.<sup>8</sup> This included 140 bald eagles, 302 harbour seals, 2,800 sea otters and 250,000 seabirds. It does not account for loss of wildlife from the oil spill over the following weeks, months and years, or the wildlife that died at sea or was not found, including the deaths of 23 killer whales.<sup>9</sup>

As noted, an oil spill would affect far more than just the immediate vicinity of the spill, the ecosystem, and local tourism businesses. Traveler perception of the whole region will become tainted. For example, a spill on the coast would impact the whole vibrant tourism industry in the Great Bear Rainforest and Haida Gwaii, and would taint the entire B.C. coast. Similarly, a pipeline spill somewhere in Northern BC will taint that entire region. When the Exxon Valdez oil spill occurred, 27% of businesses in other parts of Alaska reported significant or moderate losses.<sup>10</sup> Passive use cost the state between \$2.8 billion and \$7.19 billion depending on how the calculation is made.<sup>11</sup> By extension, a spill in B.C. would affect the entire provincial tourism industry and the Canadian tourism industry as well since many travelers who intended to include British Columbia in their travel plans would cancel or postpone visits to Canada. Data from the recent Deepwater Horizon spill in the Gulf of Mexico supports this assumption. That spill had devastating effects on the Gulf's tourism industry. The Deepwater Horizon spill lasted from April to July 2010. By July significant numbers of tourists had shifted away from the entire Gulf Coast region including areas well beyond the sites directly affected by the spill.<sup>12</sup> In a study of TripAdvisor searches in the early summer of 2010, consumers searched 65% less for information on coastal destinations in Alabama than in the same period in 2009, and 52% less for Florida. According to a TNS survey, 32% of people who already had plans to travel to the Gulf Coast that year changed them. The number of travelers who had not yet made plans, but would have had the oil spill not occurred, is unknown.<sup>13</sup> In June 2010 charter boat revenues were down an average of 70% in the southern Mississippi region, with some business' revenues down over 90%. In May of that year, non-casino hotel revenues were down 50% over the same

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<sup>8</sup> Amadeo, K. "Effect of Exxon Valdez Oil Spill on the Economy", in About.com/US Economy, [http://useconomy.about.com/od/suppl1/p/Exxon\\_Valdez\\_Oil\\_Spill\\_Economic\\_Impact.htm](http://useconomy.about.com/od/suppl1/p/Exxon_Valdez_Oil_Spill_Economic_Impact.htm)

<sup>9</sup> Exxon Valdez Oil Spill Trustee Council [http://www.evostc.state.ak.us/recovery/status\\_orca.cfm](http://www.evostc.state.ak.us/recovery/status_orca.cfm)

<sup>10</sup> Oxford Economics. 2010. Potential Impact of the Gulf Oil Spill on Tourism: A report prepared for the US Travel Association.

<sup>11</sup> Carson, R. T., R. C. Mitchell, M. Hanemann, R. J. Kopp, S. Pressers, and P. A. Ruud. 2003. Contingent Valuation and Lost Passive Use: Damages from the Exxon Valdez Oil Spill. *Environmental and Research Economics*, vol. 25 p. 257-286

<sup>12</sup> Oxford Economics, 2010

<sup>13</sup> Ibid

period the previous year.<sup>14</sup> These are disastrous figures for a tourism industry. They would lead to business failures and bankruptcies.

Studies have also shown that the negative economic impact of oil spills last over a much longer period than the spill itself and subsequent clean-up efforts. The negative economic impacts of Deepwater Horizon's spill are estimated to last for three years. The negative economic impact of the Exxon Valdez oil spill lasted more than three years, and that of one near Mexico's Mayan Riviera also lasted more than three years. Smaller spills have impacted regions' economies negatively for 1 to 3 years.<sup>15</sup>

When one weighs the total economic impact of the NGP there seems to be very little benefit (jobs and tax revenue) from this project to British Columbians. Their portion is mainly the environmental and economic risks.

## Summary

Tourism businesses rely on being able to deliver to their guests the *Super, Natural* wilderness experience they come to British Columbia for. According to the recent tourism strategy endorsed by the B.C. government, *Gaining the Edge*, the primary provincial marketing focus is to "Build upon the *Super, Natural British Columbia* brand as a travel motivator"<sup>16</sup>. This is also the wish of the WTA. It will, however, be impossible if our wildlife are lost, our waterways and other features are rendered un-useable, and viewscapes in travel corridors and the areas surrounding tourism operations are made unsightly by an oil spill.

Based on our analysis of this project, the nature and the probability of the spills, and the associated risks to B.C.'s tourism industry from the pipeline and associated tanker transportation, the WTA concludes that bitumen should not be transported through British Columbia. Consequently, the WTA is opposed to the Northern Gateway Project as it is currently proposed. We urge your panel to consider tourism and recreation values in your recommendations to the Federal government. A decision to not approve this project would be good news for B.C. as we strive for economic health, resilience and diversification.

Respectfully,

Evan Loveless, Executive Director  
Wilderness Tourism Association of BC

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<sup>14</sup> Butler, D. L., and E. Sayre. 2010. Economic Impact of the Deepwater Horizon Oil Spill on South Mississippi: Initial Findings on Revenue. International Development Doctoral Program at the University of Southern Mississippi.

<sup>15</sup> Oxford Economics, 2010

<sup>16</sup> Gaining the Edge, A Five-Year Strategy for Tourism BC, page 3.