

BC MÉTIS FEDERATION

**KINDER MORGAN- TRANS MOUNTAIN PIPELINE
EXPANSION
PRELIMINARY ASSESSMENT**



INDEX

- 1** Index
- 2** Kinder Morgan's Proposed Expansion
- 3** Pipeline Expansion Process
- 3** Kinder Morgan's Safety Record
- 5** Diluted Bitumen- A Safety Concern
- 6** Impact of the Proposed Expansion on Métis Culture
- 7** Impact of the Proposed Expansion on Métis Financial Well-being
- 8** Impact of the Proposed Expansion on Métis Health
- 8** Métis Communities Affected by the Trans Mountain Expansion
- 10** Potential Effects on the Métis in the Fraser River
- 11** Recommendations for Métis Communities
- 12** Position of the BC Métis Federation
- 14** References

This following report has been drafted as a preliminary assessment and guide to assist Métis communities and families consider the proposed Kinder Morgan Canada Trans Mountain expansion project. The report will begin by describing Kinder Morgan’s proposed expansion of its Trans Mountain pipeline system; secondly examine Kinder Morgan’s safety record; thirdly outline which Métis communities will be affected by the proposed expansion of the Trans Mountain pipeline; and finally examine the potential impact of the Kinder Morgan expansion on Métis communities in British Columbia.

Kinder Morgan has a vast network of subsidiaries and entities.ⁱ In this report, these entities will be referred to as ‘Kinder Morgan’.

Proposed Expansionⁱⁱ

Kinder Morgan is proposing to massively expand the Trans Mountain Pipeline system. If the expansion goes ahead, large sections of the pipeline will be twinned, new pump stations will be created, and several terminals will be expanded. The proposed expansion would add 980 kilometres of pipeline to the system. The capacity of the entire system would increase by almost 300%.

The new pipeline would carry heavy oils while the existing pipeline will transport refined products. The transportation of each of these products carries different environmental risks. The potential environmental impact of these products will be assessed further in this report.

The proposed expansion would also create eleven new pump stations, as well as expand existing pump stations. Finally, several terminals in Burnaby and Abbotsford would be expanded. It is worth noting that 70% of Kinder Morgan’s spills occur at pump stations or terminals.ⁱⁱⁱ

Pictured below is the proposed route for the Kinder Morgan expansion of the Trans Mountain pipeline system.



Pipeline Expansion Process

This section will outline the regulatory process that Kinder Morgan must complete in order to expand its Trans Mountain pipeline.

1. Kinder Morgan must first conduct assessments of the environmental and socioeconomic impacts of the proposed pipeline expansion.
2. Secondly, Kinder Morgan may file an application with the National Energy Board in late 2013. The
 - a. According to this timeline the National Energy Board would conduct a regulatory review from later 2013 to 2015.
 - b. The National Energy Board will decide whether the project should go ahead.
3. Finally the federal cabinet will provide the final project approval.

According to the current information Kinder Morgan plans to begin construction in 2016. Kinder Morgan plans to begin its pipeline operations in 2017.

Kinder Morgan Safety Record

Kinder Morgan's safety record must be thoroughly examined in order to help predict the likelihood of an accident/spill on the Trans Mountain pipeline. This section of the report will outline several of Kinder Morgan's safety violations, fines, and spills.

Kinder Morgan Safety Violations and Fines

Walnut Creek, California, 2004

KMGP Services Company Inc., a subsidiary of Kinder Morgan was convicted in six charges in connection with a gas pipeline explosion.^{iv} The company was fined \$15 million for the explosion which resulted in five deaths and four injuries.

California, May 21, 2007

Kinder Morgan was forced to pay \$5.3 million for environmental violations by the United States EPA. Three spills from a Kinder Morgan pipeline in California released over 760,000 liters of diesel, jet fuel, and gasoline in environmentally sensitive areas.^v

Wyoming, September 20, 2012

Kinder Morgan was ordered by the United States EPA to pay a \$316,000 fine and improve safety in two natural gas plants in Wyoming.^{vi}

Kinder Morgan Spills

Sacramento, California (November 21, 2004)

The rupture of a Kinder Morgan pipeline in California caused petroleum to spray 80 feet in the air. The spill forced the closure of a nearby highway.^{vii}

Abbotsford Sumas Tank Farm(July 15, 2005)

On July 15, 210,000 litres of crude oil were leaked at the Sumas Tank Farm operated by Kinder Morgan.^{viii} Some of this spilled oil leaked into the nearby Kilgard Creek.

Wahleach Pump Station (June 4, 2007)

On June 4, 440 barrels of crude oil leaked from the Wahleach Pump Station.^{ix} This pump station is located 40 km south of Merritt. It is reported that the leak may have occurred over the span of several days or weeks.^x This raises concerns over Kinder Morgan's ability to detect and address leaks.

Westridge Pipeline, Burnaby (July 24, 2007)

1459 barrels of oil were spilled near Burnaby from the westridge pipeline on July 24th.^{xi} 5500 litres were never recovered. This oil is now considered to have gone into the marine environment. This raises concerns over Kinder Morgan's ability to entirely clean up oil spills from its pipeline system.

Burnaby Mountain Facility(May 6, 2009)

A major spill took place at Kinder Morgan's terminal facility in Burnaby on May 6. 200,000 litres (1200 barrels) of crude oil leaked from storage tanks into the surrounding area.^{xii}

Abbotsford Sumas Terminal Site (January 24, 2012)

110,000 litres of light crude oil spilled on January 24 at Kinder Morgan's Sumas Terminal Site.^{xiii}

Abbotsford Sumas Terminal Site (April 3, 2012)

In the early hours of April 3, residents awoke to the smell of noxious chemicals. A leak of crude oil had occurred at Kinder Morgan's Sumas Mountain Facility.^{xiv}

Trans Mountain Pipeline Near Merritt (June 12, 2013)

Kinder Morgan was forced to shut down the Trans Mountain Pipeline when the company discovered oil leaking from it near Merritt.^{xv} This is the same pipeline that Kinder Morgan is proposing to expand.

Trans Mountain Pipeline Near Hope (June 27, 2013)

On June 27, Kinder Morgan was forced to stop the flow of oil on its Trans Mountain pipeline after around 4,000 litres of oil were spilled near Hope.^{xvi}

It appears Kinder Morgan has a poor safety record. Most notably, there have been seven accidents on the Trans Mountain pipeline since 2005. If Kinder Morgan proceeds with its proposed expansion of the pipeline system, the number of accidents will likely increase.

Diluted Bitumen- A Safety Concern

The proposed Trans Mountain pipeline expansion is especially concerning because of the transportation of diluted bitumen.

Pipelines carrying diluted bitumen are more prone to leak and rupture^{xvii}

Diluted bitumen is much more acidic and contains higher sulfur content than conventional crude oil. Diluted bitumen also contains more abrasive particles such as sand and chloride salts. Finally, diluted bitumen must be transported at a higher pressure and higher heat than conventional oil. All these factors contribute to an increased risk of pipeline rupture.

Diluted bitumen spills are more difficult to detect^{xviii}

Pipelines carrying diluted bitumen often develop gas bubbles because of pressure changes within the system. This process, which is known as column separation, displays many of the same signs as a leak. Pipeline operators respond to column separation by pumping even more product through the pipeline. Therefore, when leaks are mistakenly diagnosed as column separation, diluted bitumen can spew into the environment for hours unhindered. This process was behind the infamous oil spill in Kalamazoo, Michigan.

Diluted bitumen is more hazardous to humans and the environment

A report by the National Resources Defense Council reported that, “DilBit also contains vanadium, nickel, arsenic, and other heavy metals in significantly larger quantities than occur in conventional crude. These heavy metals have a variety of toxic effects, are not biodegradable, and can accumulate in the environment to become health hazards to wildlife and people”.^{xix}

This is particularly concerning to Métis communities and families that hunt, fish, and gather for food in British Columbia. This will be discussed further in the report.

Diluted bitumen is more difficult to clean up^{xx}

The final concern surrounding the transportation of diluted bitumen is the difficulty in cleaning the substance once it is spilled. Diluted bitumen is a mixture of natural gas condensate and raw bitumen. The bitumen sinks to the bottom of water while the condensate floats on the surface. It is significantly easier to remove oil floating on the water than to clean up raw bitumen that has sunk to the bottom. This issue is also concerning for fish eggs which rest at the bottom of bodies of water.

Impact of the Proposed Expansion on Métis Culture and Traditions

Métis people regularly hunt, fish, trap, and gather wild plants^{xxi}. The Métis engage in these activities for food, pleasure, and commercial purposes. They also serve the purpose of preserving the distinct Métis culture. These traditional activities depend on a healthy environment. This section of the report will examine the potential impacts of the Trans Mountain expansion on Métis culture.

Métis Fishing

Fishing is an important activity to Métis people across Canada. A report by Statistics Canada found that, “In 2006, about 40% of the adult Métis population had fished in the last 12 months”.^{xxii} The expansion of the Trans Mountain pipeline system would endanger this important aspect of Métis culture.

Light oils such as jet fuel and petroleum have been reported to kill fish when released into shallow water.^{xxiii} Heavy oils, which sink to the bottom of bodies of water, are known to destroy fish eggs. The Trans Mountain pipeline transports light oils in the form of jet fuel and petroleum as well as heavy oil. Of particular concern is the fact that the Trans Mountain pipeline already

crosses 98 streams and rivers.^{xxiv} If the expansion goes ahead, the potential for a devastating fish cull will increase significantly.

Métis Trapping

The Métis played an enormous role in Canada's fur trade. Trapping is still an important activity to many Métis today.

The proposed Kinder Morgan expansion represents a threat to the Métis tradition of trapping. Marine mammals are vulnerable to oil floating on the surface of water.^{xxv} A large oil spill could decimate the marine mammal population in large areas of British Columbia.

Métis Gathering

In 2006, almost a third of Métis reported having gathered wild plants in the previous year. This tradition will be threatened if Kinder Morgan goes ahead with its proposed expansion of the Trans Mountain pipeline. Crude oil and diesel are particularly devastating to vegetation. One study demonstrated that plants exposed to diesel and crude oil showed virtually no signs of recovery after an entire year.^{xxvi}

Métis Hunting

Hunting is a crucial part of Métis history and culture. Métis continue to hunt on a regular basis. The majority of those who hunt do so for sustenance. The Kinder Morgan expansion of the Trans Mountain pipeline jeopardizes this pastime. The potential impact of oil spills or leaks on marine life and vegetation will reverberate throughout the food chain. This will endanger larger mammals and the future of the Métis hunt.

Impact of the Proposed Expansion on Métis Financial Well-being

The release of oil or other chemicals from Kinder Morgan's Trans Mountain pipeline would not only have detrimental effects on Métis culture. There would also be negative repercussions to the financial well-being of many Métis communities and households.

45% of Métis who engage in trapping do so for food. Another 39% who trap do so for commercial purposes.^{xxvii} The statistics also show that a significant number of Métis continue to hunt, fish, and gather wild plants for food and commercial purposes.^{xxviii} If Kinder Morgan's

proposed expansion of the Trans Mountain pipeline system goes ahead, Métis families and communities will be at a greater risk for economic devastation.

Impact of the Proposed Expansion on Métis Health

As mentioned above, a report by the National Resources Defense Council outlined the hazardous properties of diluted bitumen. “These heavy metals have a variety of toxic effects, are not biodegradable, and can accumulate in the environment to become health hazards to wildlife and people”.

Many Métis hunt, trap, fish, and harvest plants for food. In the event of a spill of diluted bitumen, heavy metals would accumulate in vegetation, fish, and mammals. Secondary ingestion of heavy metals would therefore pose a threat to Métis health. Exposure to heavy metals causes an increased risk of cancer, birth defects, and nervous system damage.

Métis Communities Affected by the Trans Mountain Expansion

Several Métis communities exist in the area of the proposed expansion. Métis communities in Chilliwack, Surrey, Merritt, Kamloops, Vancouver, Valemont, Kelly Lake, and North Saanich will be adversely affected by the proposed pipeline expansion. All Métis communities in these areas must be consulted by Kinder Morgan and the British Columbia government. Consultation is a constitutional obligation as well as a way to foster reconciliation between Métis communities and the Crown.

Chilliwack: [Chilliwack Métis Association](#)

Kinder Morgan’s Trans Mountain pipeline runs through Chilliwack. The expansion of the Trans Mountain pipeline will affect the Métis community in Chilliwack. The Chilliwack Métis Association, therefore, must be consulted by the Crown and by Kinder Morgan.

Surrey: [Nova Métis Heritage Association](#)

Kinder Morgan's Trans Mountain pipeline runs through Surrey. The expansion of the Trans Mountain pipeline will affect the Métis community in Surrey. The Nova Métis Heritage Association, therefore, must be consulted by the Crown and by Kinder Morgan.

Merritt: Merritt District Métis Association

Kinder Morgan's Trans Mountain pipeline runs through Merritt. The expansion of the Trans Mountain pipeline will affect the Métis community in Merritt. The Merritt District Métis Association, therefore, must be consulted by the Crown and by Kinder Morgan.

Kamloops: Two Rivers Métis Society

Kinder Morgan's Trans Mountain pipeline runs through Kamloops. The expansion of the Trans Mountain pipeline will affect the Métis community in Chilliwack. The Chilliwack Métis Association, therefore, must be consulted by the Crown and by Kinder Morgan.

Vancouver: [Vancouver Métis Cultural Society](#)

Kinder Morgan's proposed expansion will cause an increase in tanker traffic around Vancouver. This will significantly increase the risk of a tanker accident which could devastate marine life in the area. The expansion of the Trans Mountain pipeline will affect the Métis community in Vancouver. Therefore, the Vancouver Métis Cultural Society and the Vancouver Métis Association must be consulted by the Crown and by Kinder Morgan.

North Saanich: North Saanich Michif Society

Kinder Morgan's proposed expansion will not directly affect the Métis in North Saanich. However, increased tanker traffic poses a threat to the North Saanich Métis. Therefore, the North Saanich Michif society must be consulted by the Crown and by Kinder Morgan.

Valemont:

Kinder Morgan's Trans Mountain pipeline runs through Valemont. The expansion of the Trans Mountain pipeline will affect the Métis community in Valemont. The Métis in Valemont, therefore, must be consulted by the Crown and by Kinder Morgan.

Kelly Lake: Kelly Lake Métis Settlement Society

Kinder Morgan's Trans Mountain pipeline has expanded in much of the area of the asserted Kelly Lake Métis Territory with absolutely no consultation to date. The expansion of the Trans Mountain pipeline has already occurred to the British Columbia boarder without information or prior consent. Kelly Lake Métis Settlement Society is current undertaking legal actions due to

improper consultation by industry and serious consideration should be made by Kelly Lake Métis leadership to contemplate the current actions by Kinder Morgan on their initial Trans Mountain expansion without any information or assessment to include the impacts to Kelly Lake Métis Territory.

Potential Effects on the Métis in the Fraser River

Many Métis communities across British Columbia may be adversely affected by the expansion of the Trans Mountain pipeline system. Of particular concern, however, are the Métis communities in the Fraser River system. The proposed expansion of the Trans Mountain pipeline would bring the pipeline closer to the Fraser River in an attempt to avoid residential areas.^{xxix}

Ecological importance of the Fraser River

The Fraser River is a highly diverse ecosystem. The basin of the Fraser River is known as the most productive salmon system in the world.^{xxx} The wetlands of the Fraser River, which are the largest in British Columbia, support an abundance of mammals and birds.^{xxxi}

Save the Fraser Declaration

The BC Métis Federation is a signatory of the Save the Fraser Declaration. This declaration signals the BC Métis Federation's opposition to the transportation of Alberta oil sands products through the Fraser River Watershed. The BC Métis Federation signed this declaration along with many other Aboriginal groups and First Nations in BC.



B.C. Métis Federation President, Keith Henry (left) at the signing of the Save the Fraser Declaration

Recommendation for Métis Communities

There are several ways for Métis communities to engage the proposed Kinder Morgan Trans Mountain pipeline expansion process. It is crucial that Métis communities voice their concerns about the impacts of the Trans Mountain expansion as soon as possible.

Contact community leaders to express concerns

Métis people should contact the leaders of their Métis communities and organizations. It is essential that Métis communities and organizations become actively involved in opposing the Trans Mountain pipeline expansion.

Contact the provincial government

It is crucial that Métis people contact the provincial government to express concerns over the Trans Mountain expansion. Métis people in British Columbia should also contact the provincial government about their unwillingness to consult with Métis communities.

Contact Kinder Morgan

Kinder Morgan needs to be speaking directly with Métis communities who wish to become involved in the regulatory process. Kinder Morgan also has a number of online forums where Métis people can voice their concerns about the pipeline expansion. These can be found at www.transmountain.com.

Attend Kinder Morgan events

Kinder Morgan regularly holds meetings with the public and will continue to do so in the future. BC Métis Federation and partner communities will undertake to schedule Métis meetings and where Métis people can express their concerns and better understand about the pipeline expansion.

More information about the Kinder Morgan public meetings can be found at the website listed above.

BC Métis Federation and Kinder Morgan Canada are working to identify scheduled community meetings from September – November 2013. Refer to the BC Métis Federation website for future meeting dates www.bcmétis.com.

Participate in a National Energy Board Hearing

As part of the regulatory process, the National Energy Board will be holding hearings in British Columbia. Métis people and communities should make every attempt possible to participate in this hearing. Below is information found on the Kinder Morgan website about this process:

There are generally two ways that individuals or groups can participate in a hearing:

- By filing a letter of comment: a written statement about the writer's views
- As an intervenor: An individual or group granted intervenor status by the NEB may file written evidence, receive all filings submitted by the company, comment on evidence filed and make a final argument ([more details](#) about applying to participate in a hearing)

The following documents are useful to Métis who wish to get involved.

[*The Public Hearing Process: Your Guide to Understanding NEB Hearings*](#)

[*A Proposed Pipeline or Power Line Project: What You Need to Know*](#)

Métis people and communities who wish to actively oppose the Kinder Morgan pipeline should take steps to do so immediately. There are a number of ways to get involved. These include contacting Métis community leaders, the provincial government, contacting Kinder Morgan, attending Kinder Morgan public forums, and participating in a National Energy Board hearing.

Position of the BC Métis Federation

The proposed expansion of the Kinder Morgan Trans Mountain pipeline poses a threat to Métis culture, financial well-being, and health.

The B.C. Métis Federation maintains that the Crown has a constitutional obligation to consult with Métis communities in British Columbia whose Aboriginal rights may be potentially infringed by the proposed project. This position is outlined in the BC Métis Federation report: [Duty to Consult](#).

The B.C. government must immediately begin meaningful consultation with Métis communities in the province. Secondly, the Crown must be prepared to accommodate Métis concerns about the proposed project. Finally, Kinder Morgan must also immediately begin meaningful consultation with Métis communities.

Specific Recommendations to Kinder Morgan

This section will outline the initial specific recommendations of the BC Métis Federation to Kinder Morgan.

- Kinder Morgan must reassess the transportation of diluted bitumen.

Diluted bitumen is a corrosive and toxic substance. It poses environmental and health risks to Métis communities. Kinder Morgan must reassess the transportation of this dangerous substance.

- Kinder Morgan must reroute its proposed pipeline so that it avoids the Fraser River

The Fraser River is a vibrant ecosystem. It is also an important area for the preservation of Métis culture through trapping, fishing, hunting, and harvesting. The proposed expansion of the Trans Mountain pipeline presents a significant danger to the Fraser River. The pipeline should be rerouted so that it does not come close to the Fraser River.

- Kinder Morgan must assess the impacts of the proposed expansion on Métis communities.

If the proposed expansion goes ahead, there is potential for irreversible damage to Métis cultural traditions, health, and financial well-being. Kinder Morgan must begin assessing this potential damage.

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