

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL



PANEL

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Visit www.burnaby.ca/tmep for further information

WELCOME

A MESSAGE FROM YOUR MAYOR AND COUNCIL

"Welcome to our public information event on the proposed Kinder Morgan expansion project.

Thank you for taking the time to be here tonight to share with the City of Burnaby your thoughts on the proposed Kinder Morgan pipeline expansion project and to learn why the City is opposed to the proposal and formally requested intervenor status in the hearings that will determine whether or not the project can proceed.

The construction and operation of this pipeline would have significant negative impacts on our city. We are here tonight to share what those detrimental community impacts could be and to hear from you as we develop our strategy as an intervenor to oppose this project."

- Mayor Derek Corrigan and Burnaby City Council

TODAY, WE ARE HERE TO:

- Provide information to you on what we know about the proposed Kinder Morgan expansion project;
- Outline the City of Burnaby's opposition;
- Describe the potential issues, impacts and concerns with this project; and,
- Hear from you about your issues, concerns, and questions.

All of our citizens' comments and input will be collected and utilized as part of our ongoing opposition to the Kinder Morgan expansion proposal.

THE ISSUE...

The City of Burnaby is opposed to the proposed Kinder Morgan Trans Mountain Expansion Project in Burnaby.

On December 16, 2013, Kinder Morgan made an application to the National Energy Board (NEB) to expand the Trans Mountain pipeline system.

The proposed project, generally referred to as the Trans Mountain Expansion Project (TMEP), would allow for the development of a second pipeline from Strathcona County, Alberta (near Edmonton), to Burnaby, BC, for the shipment of unrefined, heavy crude petroleum products to the United States and new foreign markets.

As Burnaby is the primary terminus for the Kinder Morgan Trans Mountain pipeline system, the proposal would directly and significantly impact Burnaby residents, businesses, and property owners.

While the City of Burnaby does not have any regulatory powers on these matters, the City will continue to oppose Kinder Morgan in order to protect the health and safety of its citizens, and the surrounding environment.

On April 2, 2014, the NEB Issued a Hearing Order for the Kinder Morgan Trans Mountain Expansion Project, outlining the Public Hearing Process and who could participate. The City of Burnaby was granted by the NEB Intervenor Status, given the direct impacts the TMEP would have on Burnaby and its citizens.



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KINDER MORGAN'S TRANS MOUNTAIN EXPANSION PROJECT

DID YOU KNOW?

This oil is not intended for BC or Canadian use. In fact, Kinder Morgan will not guarantee an adequate supply for local refineries.

On December 16, 2013, Kinder Morgan made an application to the National Energy Board (NEB) to expand their Trans Mountain pipeline system.

The proposed project would create a second pipeline from Strathcona County, Alberta (near Edmonton) to Burnaby. Kinder Morgan intends to use this new line for the shipment of heavy crude petroleum products to the United States and new foreign markets.

Kinder Morgan's intent is to triple the capacity of their pipeline, infrastructure, and facilities. The proposed project has three main components that will impact Burnaby:

- The pipeline expansion - a new pipeline and additional distribution pipelines.
- The expansion of the Burnaby Mountain Terminal (oil storage tank farm).
- The expansion Westridge Marine Terminal in Burrard Inlet.



PIPELINE EXPANSION

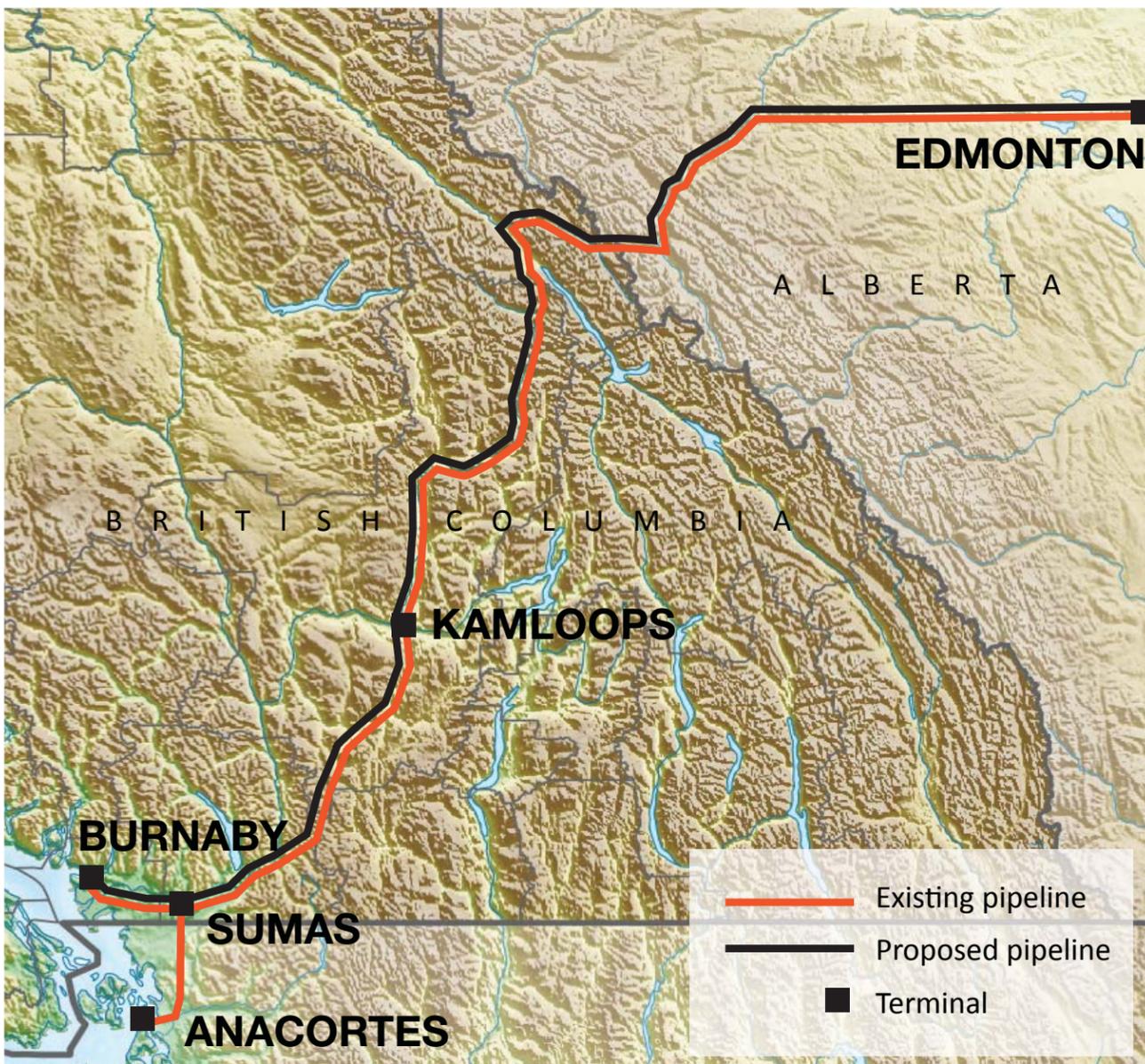


BURNABY MOUNTAIN
TERMINAL EXPANSION



WESTRIDGE MARINE
TERMINAL EXPANSION

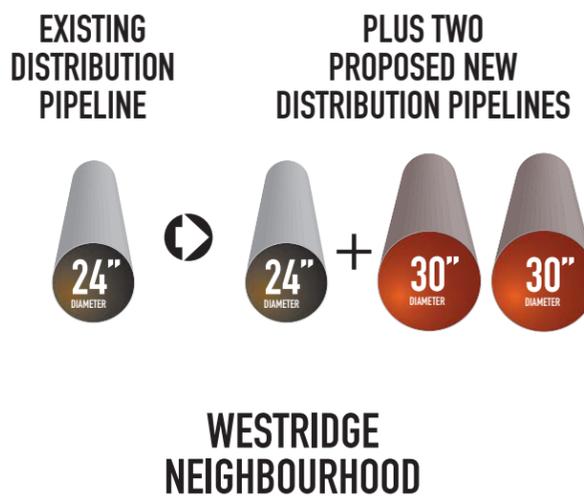
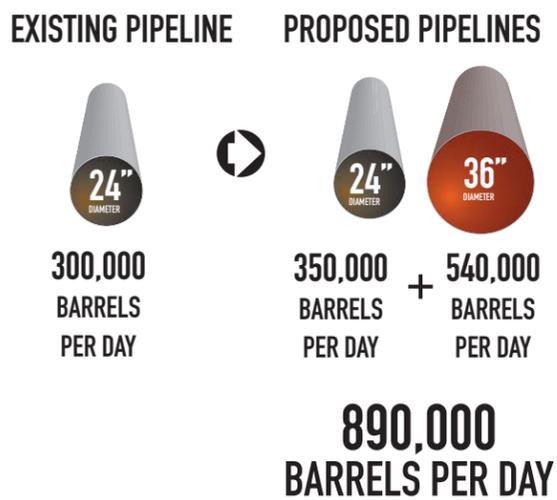
KINDER MORGAN TRANS MOUNTAIN PIPELINE ROUTE



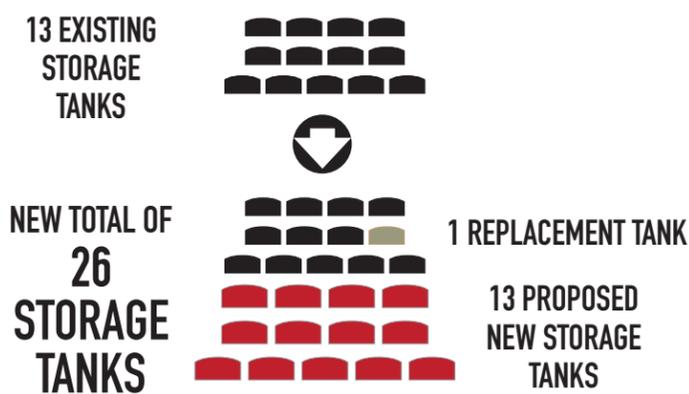
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WHAT DOES THIS MEAN FOR BURNABY?

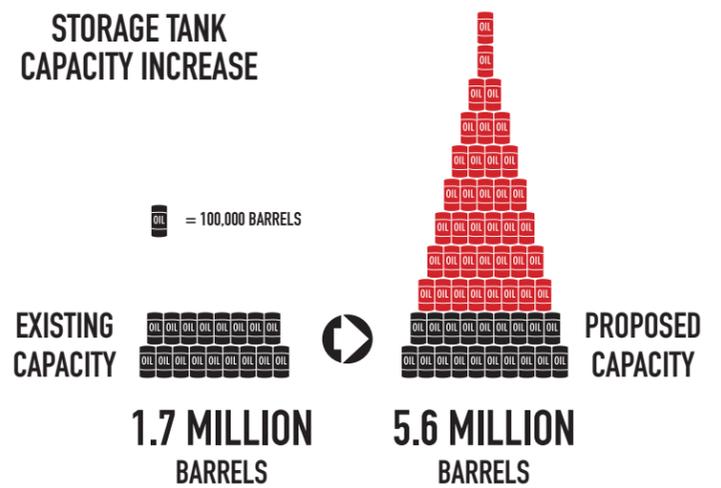
PIPELINE EXPANSION



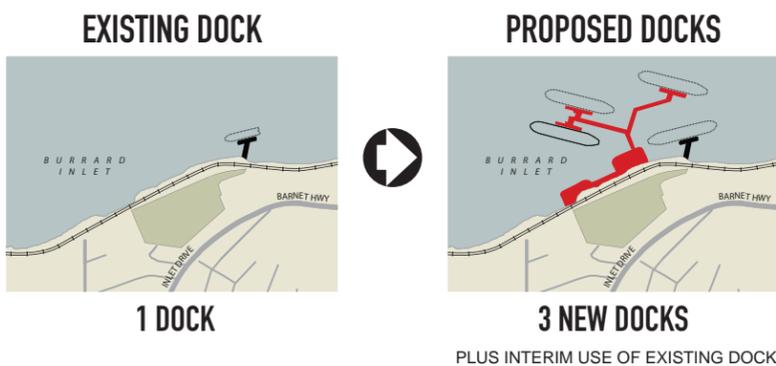
BURNABY MOUNTAIN TERMINAL EXPANSION



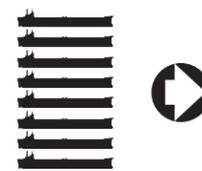
STORAGE TANK CAPACITY INCREASE



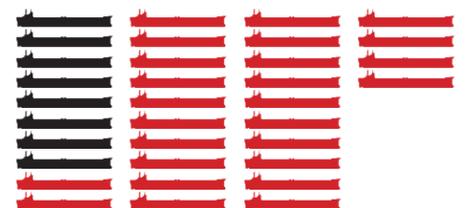
WESTRIDGE MARINE TERMINAL EXPANSION



EXISTING TANKERS



PROPOSED TANKERS



BY THE NUMBERS

1/3

of the total storage volume of the Trans Mountain pipeline system would be stored in Burnaby

90%

of the proposed pipeline through Burnaby follows a new corridor

7.4 km

existing Kinder Morgan TMEP pipeline in Burnaby

17.1 km

estimated length of Kinder Morgan TMEP pipeline in Burnaby

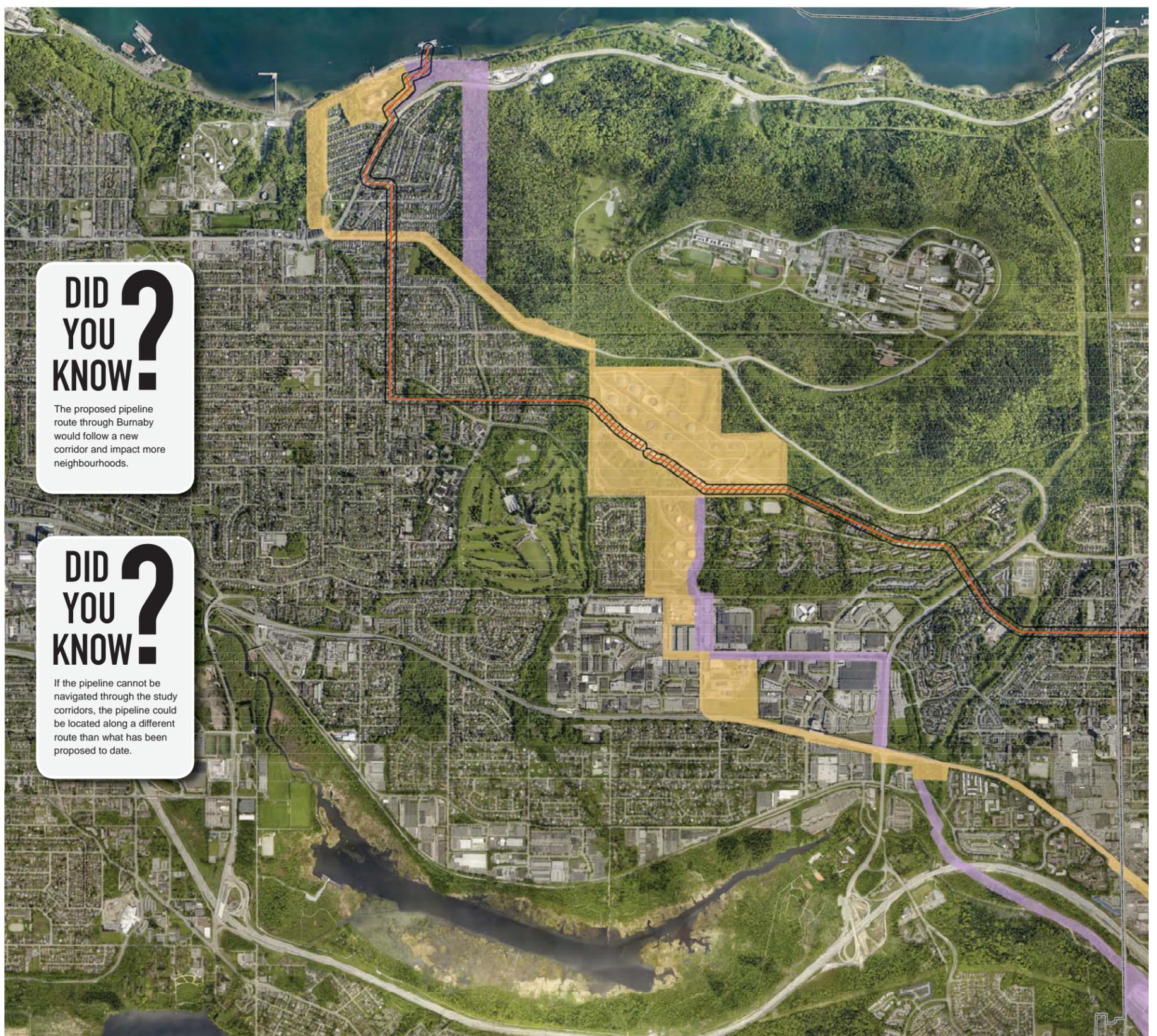
CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

HOW THE PROPOSED NEW PIPELINE COULD AFFECT OUR CITY

Kinder Morgan has advanced several study corridor proposals through Burnaby for the location of the new pipeline and additional distribution lines terminating at the Westridge Marine Terminal.

The routing of the pipeline corridor will not be finalized until detailed field studies, surveys and engineering design work have been completed. Typically, these studies follow the approval and issuance of a Certificate from the NEB for the overall project. This means that Burnaby's citizens will likely not know the final route until after the project has been approved.

PROPOSED ROUTING



DID YOU KNOW?

The proposed pipeline route through Burnaby would follow a new corridor and impact more neighbourhoods.

DID YOU KNOW?

If the pipeline cannot be navigated through the study corridors, the pipeline could be located along a different route than what has been proposed to date.

 Existing Pipeline (with safety zone)

 "Selected" Pipeline Corridor

 "Alternate" Pipeline Corridor



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PANEL
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Visit www.burnaby.ca/tmep for further information

PLEASE
PIN WHERE
YOU LIVE.

WHERE DO YOU LIVE?



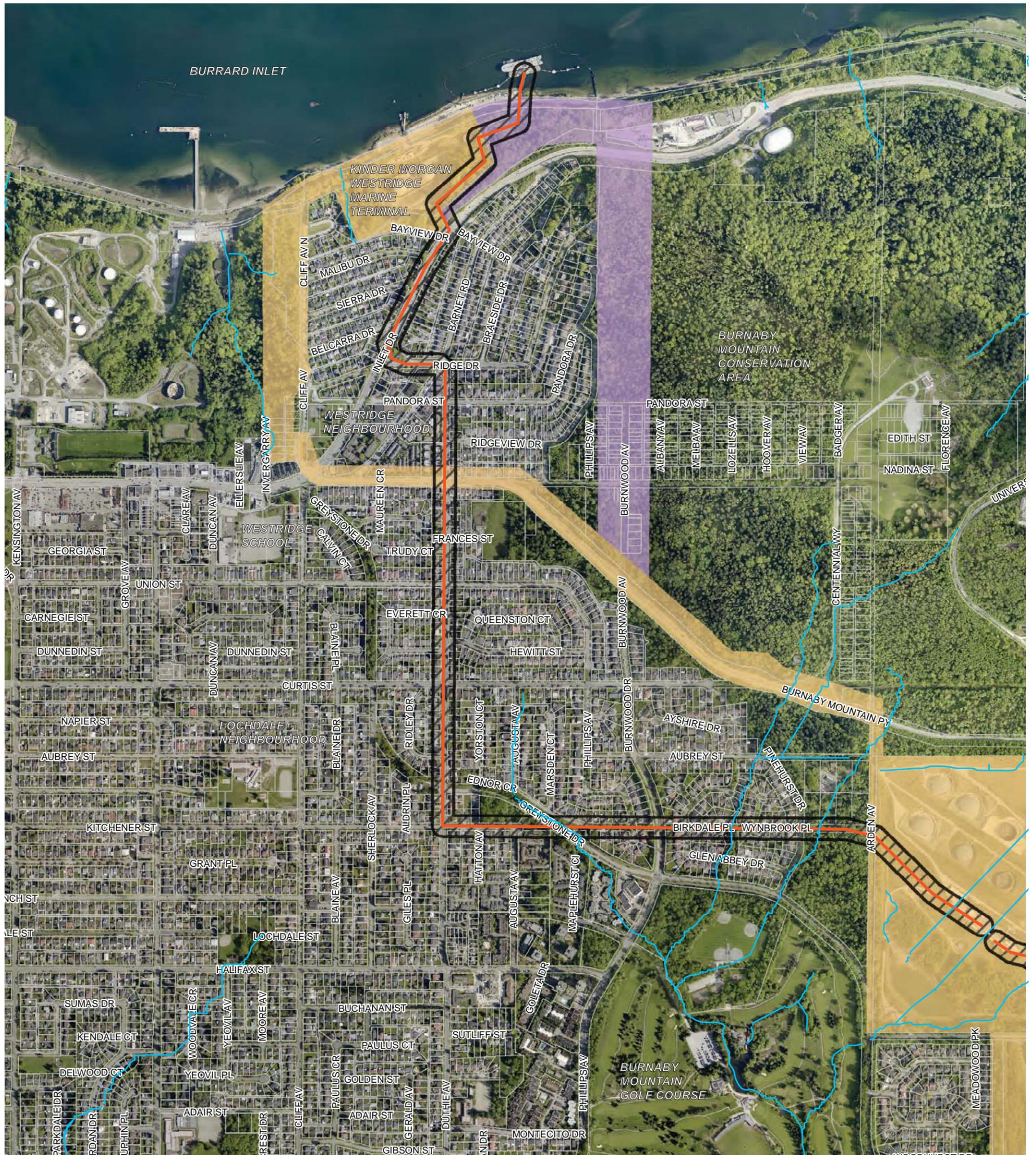
BURNABY 2012

-  Existing Pipeline (with 30m "safety zone")
-  "Selected" Pipeline Corridor
-  "Alternate" Pipeline Corridor



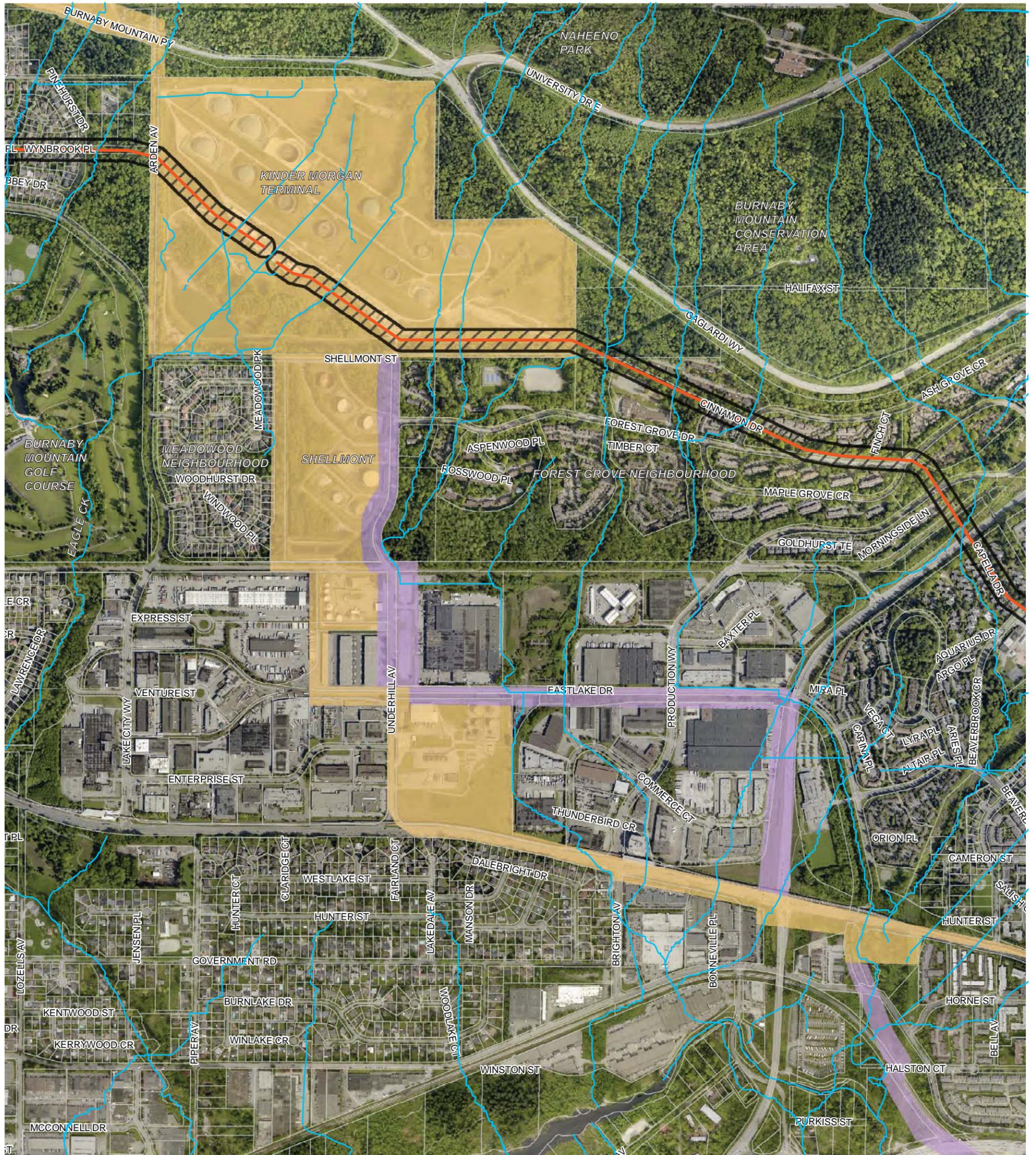
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PROPOSED ROUTING: WESTRIDGE AND LOCHDALE NEIGHBOURHOODS



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

PROPOSED ROUTING: GOVERNMENT ROAD AND FOREST GROVE NEIGHBOURHOODS



Existing Pipeline (with safety zone)



"Selected" Pipeline Corridor



"Alternate" Pipeline Corridor

Creek



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

PROPOSED ROUTING: LOUGHEED TOWN CENTRE



Existing Pipeline (with safety zone)



"Selected" Pipeline Corridor



"Alternate" Pipeline Corridor

Creek



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

THE PROPOSED NEW PIPELINE

Kinder Morgan has an existing pipeline in Burnaby. They are proposing a new pipeline for heavy crude oil within a new right-of-way, which will triple the capacity of the pipeline system in our City.

DID YOU KNOW?

The Kinder Morgan pipeline would have more capacity than the proposed Enbridge Northern Gateway pipeline.

Northern Gateway pipeline proposes a capacity of 525,000 barrels per day.

The Kinder Morgan pipeline proposes an increased capacity of 890,000 barrels per day.

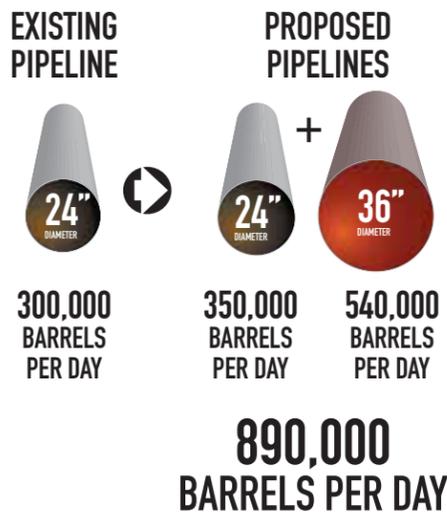
That's 365,000 barrels per day, or 1.5 times the capacity of the Northern Gateway pipeline.

INCREASED SIZE AND CAPACITY

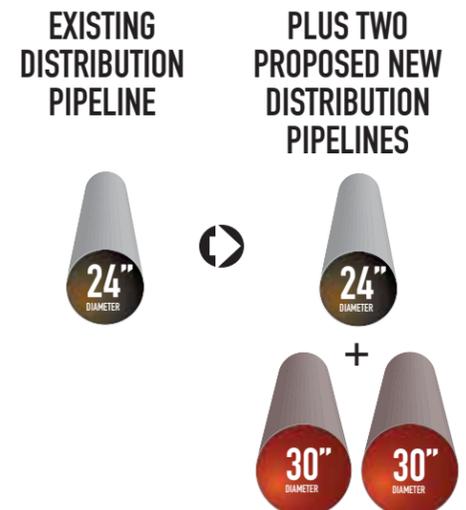
The proposal would increase the capacity of the pipeline system from 300,000 barrels per day (bpd) to 890,000 barrels per day.

The existing pipeline would carry an increased volume and flow.

In addition, two new distribution lines will be created, with an additional right-of-way, within the Westridge neighbourhood.



WESTRIDGE NEIGHBOURHOOD



CHANGE IN TYPE OF OIL PRODUCTS



EXISTING PIPELINE:

A range of light and synthetic crude petroleum products.



PROPOSED NEW PIPELINE:

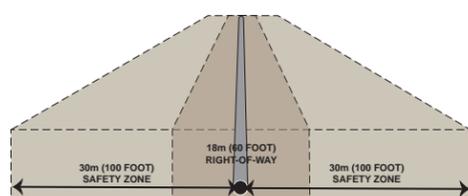
Heavy crude petroleum products.

DID YOU KNOW?

The existing pipeline would also have the ability to be switched over to carry heavy crude petroleum products.

LARGE PIPELINE RIGHT-OF-WAY

The new pipeline would require an 18-metre right-of-way with a 30-metre "safety zone" on either side. During construction, a 45-metre right-of-way would be required to accommodate Kinder Morgan's machinery, pipeline, and personnel.



Required construction right-of-way



Impact on landscape from construction

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THE BURNABY MOUNTAIN TERMINAL EXPANSION



EXISTING FACILITY:

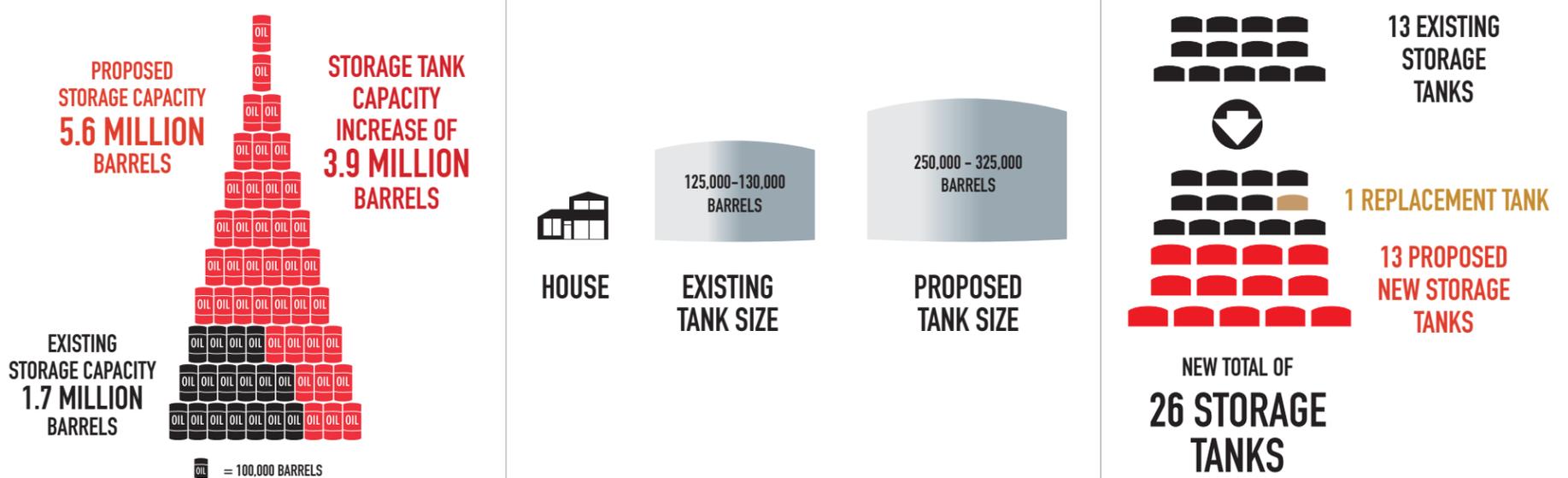
- 189-acre site
- Located on Burnaby Mountain at 7185 Shellmont Street
- Built in 1952 – 53 with eight oil storage tanks
- Currently has 13 oil storage tanks
- Each oil storage tank has a capacity of approximately 125,000 – 130,000 barrels
- Existing Terminal capacity is 1.7 million barrels of oil



PROPOSED EXPANSION:

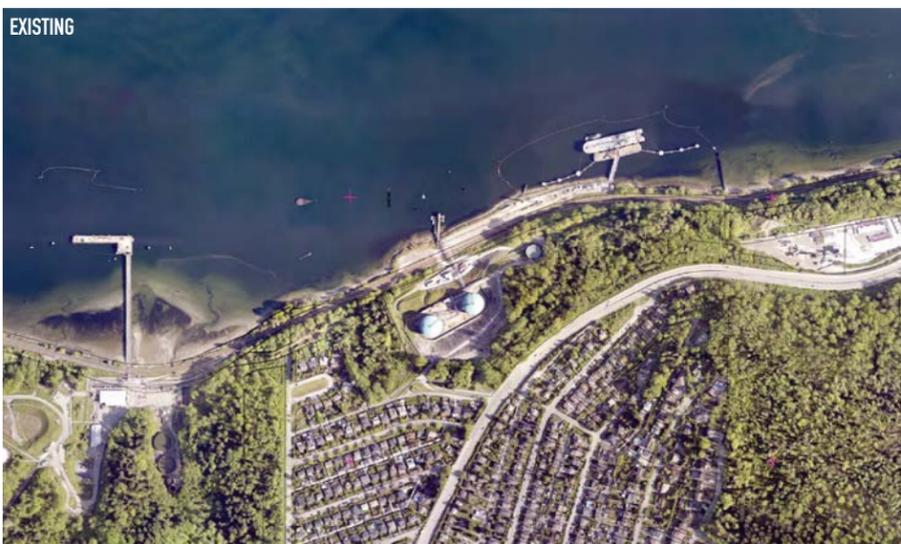
- Increases the number of oil storage tanks to 26
- Includes 13 new oil storage tanks and one replacement of an older oil storage tank
- Proposed larger oil storage tanks would each have a capacity of approximately 250,000 – 325,000 barrels
- Proposed Terminal capacity would be 5.6 million barrels of oil
- Approximately 1/3 of the total oil storage volume of the expanded pipeline system would be located in Burnaby

HOW MUCH OIL IS THAT?



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

THE WESTRIDGE MARINE TERMINAL EXPANSION



Aframax tanker

EXISTING FACILITY:

- Established in 1952 – 53
- Located on Kinder Morgan's site at 7065 Bayview Drive adjacent to Burrard Inlet and the Westridge neighbourhood
- Six hectares (15 acres) site on land
- 10.74 hectares (26.5 acres) water lot is leased from Port Metro Vancouver
- Dock facilities have capacity to accommodate one Aframax tanker (carrying up to 580,000 barrels of oil) plus utility barges and tug boats
- Oil and jet fuel storage and distribution infrastructure

PROPOSED EXPANSION:

- 1.4 hectare (3.5 acres) filling of the Burrard Inlet foreshore
- Construction of new dock facilities with capacity to accommodate three Aframax tanker plus utility barges and tug boats
- The new dock would accommodate three Aframax tankers, plus additional utility barge and tug boats capacity
- Increased oil and jet fuel storage and distribution infrastructure
- Increase marine traffic from eight to 34 tankers per month
- Interim use of existing dock



Each Aframax oil tanker would transport between 550,000-580,000 barrels of oil



Proposed facility would accommodate three tankers and increase impacts



The expanded terminal would include 1.4 hectare (3.5 acres) of shoreline fill to accommodate new infrastructure

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THE NATIONAL ENERGY BOARD (NEB)

The National Energy Board (NEB) is the regulatory body responsible for the approval of pipeline developments. The Kinder Morgan TMEP application is under the full jurisdiction of the NEB and federal government.

As part of the review process for major pipeline developments, the NEB is mandated to hold a Public Hearing, during which stakeholders directly affected by the project may participate.

KINDER MORGAN'S APPLICATION

On December 16, 2013, Kinder Morgan made an application to the National Energy Board (NEB) to expand the Trans Mountain pipeline system.

As part of Kinder Morgan's application to the NEB, and in accordance with Section 52 of the NEB Act, they are seeking issuance of a Certificate of Public Convenience and Necessity (CPCN), which would permit the construction and operation of the proposed project.

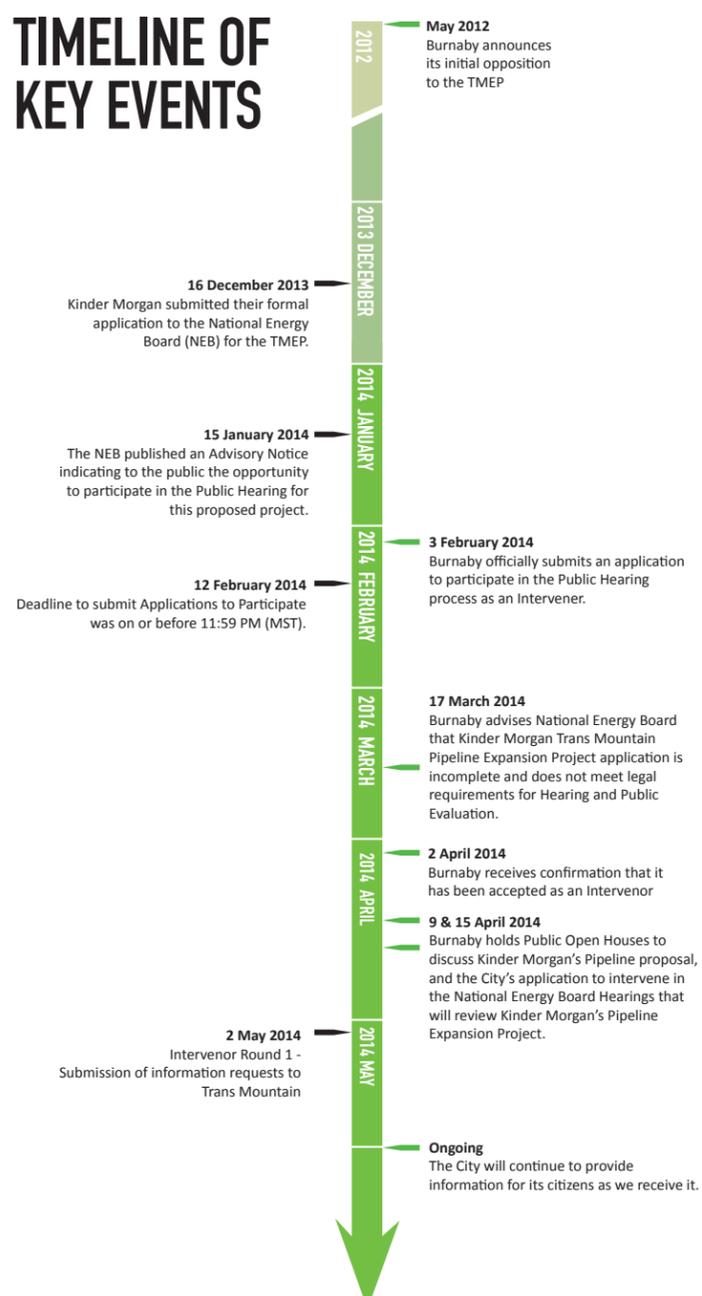
LIST OF ISSUES TO BE CONSIDERED BY THE NEB

The NEB has published a List of Issues which they are willing to consider at the Public Hearing in relation to the Kinder Morgan application:

1. The need for the proposed project.
2. The economic feasibility of the proposed project.
3. The potential commercial impacts of the proposed project.
4. The potential environmental and socio-economic effects of the proposed project, including any cumulative environmental effects that are likely to result from the project, including those required to be considered by the NEB's Filing Manual.
5. The potential environmental and socio-economic effects of marine shipping activities that would result from the proposed Project, including the potential effects of accidents or malfunctions that may occur.
6. The appropriateness of the general route and land requirements for the proposed project.
7. The suitability of the design of the proposed project.
8. The terms and conditions to be included in any approval the Board may issue.
9. Potential impacts of the project on Aboriginal interests.
10. Potential impacts of the project on landowners and land use.
11. Contingency planning for spills, accidents or malfunctions, during construction and operation of the project.
12. Safety and security during construction of the proposed project and operation of the project, including emergency response planning and third-party damage prevention.

The NEB does not intend to consider the environmental and socio-economic effects associated with upstream activities, the development of oil sands, or the downstream use of the oil transported by the pipeline.

TIMELINE OF KEY EVENTS



DID YOU KNOW?

Municipal governments may apply to be Intervenor in the Public Hearing. However, they have no jurisdiction or regulatory powers on these matters.

DID YOU KNOW?

The following municipalities in the Lower Mainland have been accepted as Intervenor:

- City of Burnaby
- City of Vancouver
- City of Surrey
- City of Coquitlam
- City of New Westminster
- City of North Vancouver
- City of Richmond
- City of Port Moody
- City of Abbotsford
- City of White Rock
- District of North Vancouver
- District of West Vancouver
- Township of Langley
- Village of Belcarra

In addition, Metro Vancouver and Port Metro Vancouver have been accepted as an Intervenor in the NEB public hearing process.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL



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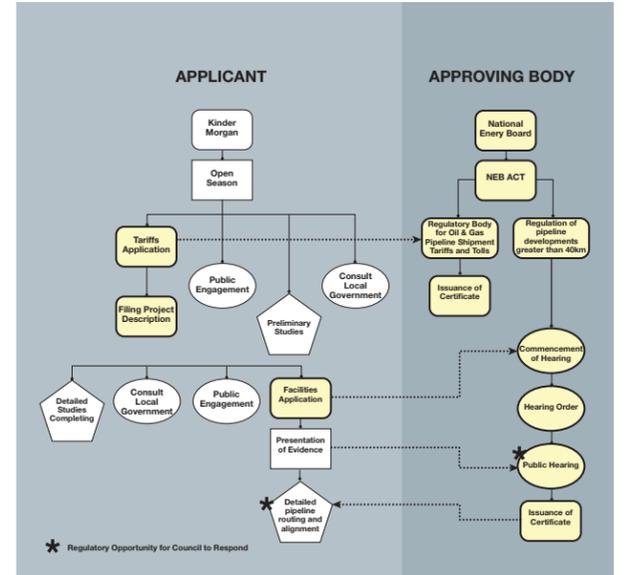
AN UNDEFINED NEB PROCESS

Kinder Morgan's application will be the first to be put through the federal government's newly introduced shortened NEB process. On April 2, 2014, the NEB issued a Hearing Order for the Trans Mountain Expansion Project. The Hearing Order outlines the following:

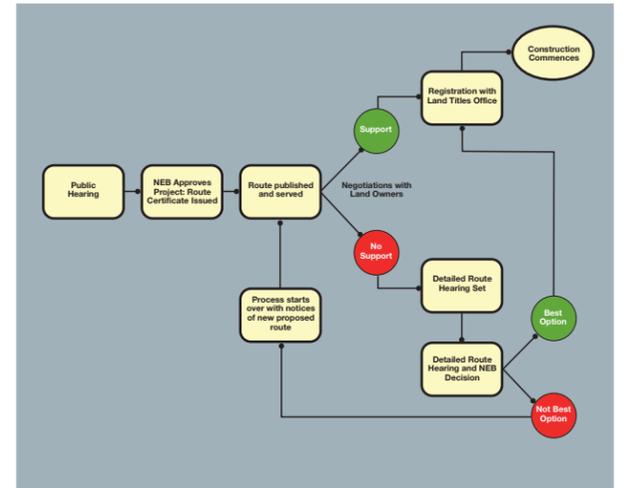
- manner in which the Public Hearing process will be conducted;
- who may participate in the Public Hearing and in what manner (Intervenor or commentator);
- timeline in which participants must submit written documents (Information Requests) and oral arguments; and,
- when Kinder Morgan must submit their final written reply argument.

In line with recent amendments to the NEB Act, the NEB must release a final decision to the Governor in Council (federal government) regarding the TMEP by July 2, 2015. The federal government has three months, thereafter, to decide whether or not to accept the NEB's decision.

FORMER NEB STANDARD APPROVALS PROCESS: OVERALL PROJECT

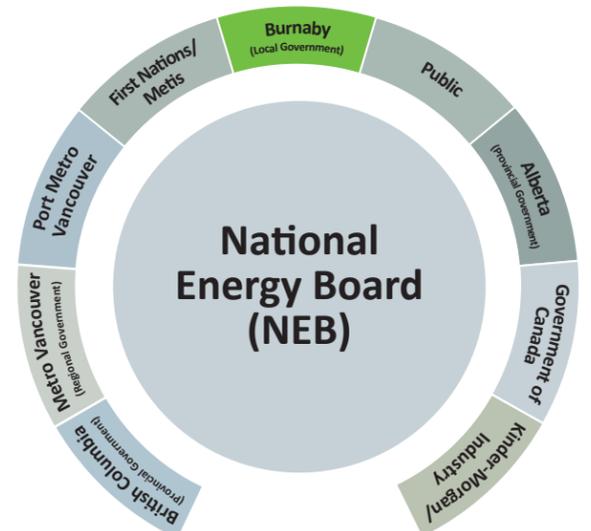


FORMER NEB STANDARD APPROVALS PROCESS: PIPELINE ROUTING



The process diagrams above are based on the standard process for NEB approvals under the previous 24-month timeline. It is important to note, that to-date, these processes have NOT been followed and no explanation has been provided.

STAKEHOLDERS IN THE NEB PROCESS FOR THE KINDER MORGAN APPLICATION



DID YOU KNOW?

Canada does not have a national energy plan. Kinder Morgan's proposed project and its review by the NEB is being undertaken without the benefit of a national strategy.

DID YOU KNOW?

The NEB allowed less than one month for the public to apply to participate as an Intervenor in the Public Hearing.

DID YOU KNOW?

The NEB has released the list of parties who will participate in the public hearing. More than 2,100 applications were submitted to participate. The NEB considered each application and has determined that 400 will participate as intervenors and 1,250 as commenters.

GOVERNMENT ROLES

FEDERAL: The Government of Canada has the ultimate authority over the National Energy (NEB) and its decision-making process and can overrule any decision by the NEB.

PROVINCIAL: The Government of British Columbia has been accepted as an Intervenor. Its ultimate authority to impose conditions for this project is uncertain.

MUNICIPAL: Municipal governments were given the opportunity to apply to be Intervenor in the process. They do not, however, have any jurisdiction or regulatory powers on these matters.

WHAT IS AN INTERVENOR?

An Intervenor is defined as an individual, group or corporation who has an "interest" in a proposed project and would like to formally participate in the NEB Public Hearing.

The NEB determines which applicants meet their criteria to be an Intervenor and how "interest" is defined. The NEB has also determined what issues will be heard. For example, the impacts of climate change is not listed as an issue that they will hear.

The City of Burnaby has been accepted as an Intervenor.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

BURNABY'S OPPOSITION

The City of Burnaby is opposed to the proposed Kinder Morgan Trans Mountain Expansion Project.

OUR ACTIONS TO-DATE INCLUDE:

On **May 28, 2012**, the City of Burnaby expressed opposition to the proposed project to the National Energy Board, senior levels of government and to Kinder Morgan, given the impacts and implications of the proposed expansion for Burnaby and its communities.

On **February 3, 2014**, Burnaby officially applied to the NEB to participate in the Public Hearing process as an Intervenor. On April 2, 2014, the NEB approved Burnaby's application.

On **March 17, 2014**, Burnaby formally requested that the National Energy Board find that the Kinder Morgan Trans Mountain Pipeline Expansion Project Application incomplete, and reject it on the basis that it contains neither the information needed for the NEB to make an informed decision nor sufficient information for the public to understand and analyze the impacts of the Project.

In addition, the City of Burnaby has held numerous meetings with residents and local interested parties to provide information on the proposal and its potential impacts.

OUR STATED CONCERNS

"Given the existing and projected urban growth and development of the City and Metro Vancouver region, the risks and impacts associated with the TMEP expansion are exacerbated by the concentration of petroleum storage and shipping activities within the expanding urban region. From an economic (including other port activities and tourism), environmental, public health – quality of life, and social perspective, the impacts of an accident could be catastrophic at both the local and regional level, posing irreparable damage to the economic diversity and viability of a Port-based region, the environment, and the quality of life of its citizens."

– CITY OF BURNABY COUNCIL REPORT

THE CITY'S ROLE AS AN INTERVENOR

An Intervenor is an individual, group, or corporation who has an interest in a proposed project and would like to formally participate in the Public Hearing.

To qualify as an Intervenor, the City must demonstrate the following to the NEB:

- the City is directly affected by the granting or refusal of an application; OR,
- the City has relevant information or expertise for the Board to consider; OR,
- both of the above.

AS AN INTERVENOR, BURNABY WILL BE ALLOWED TO:

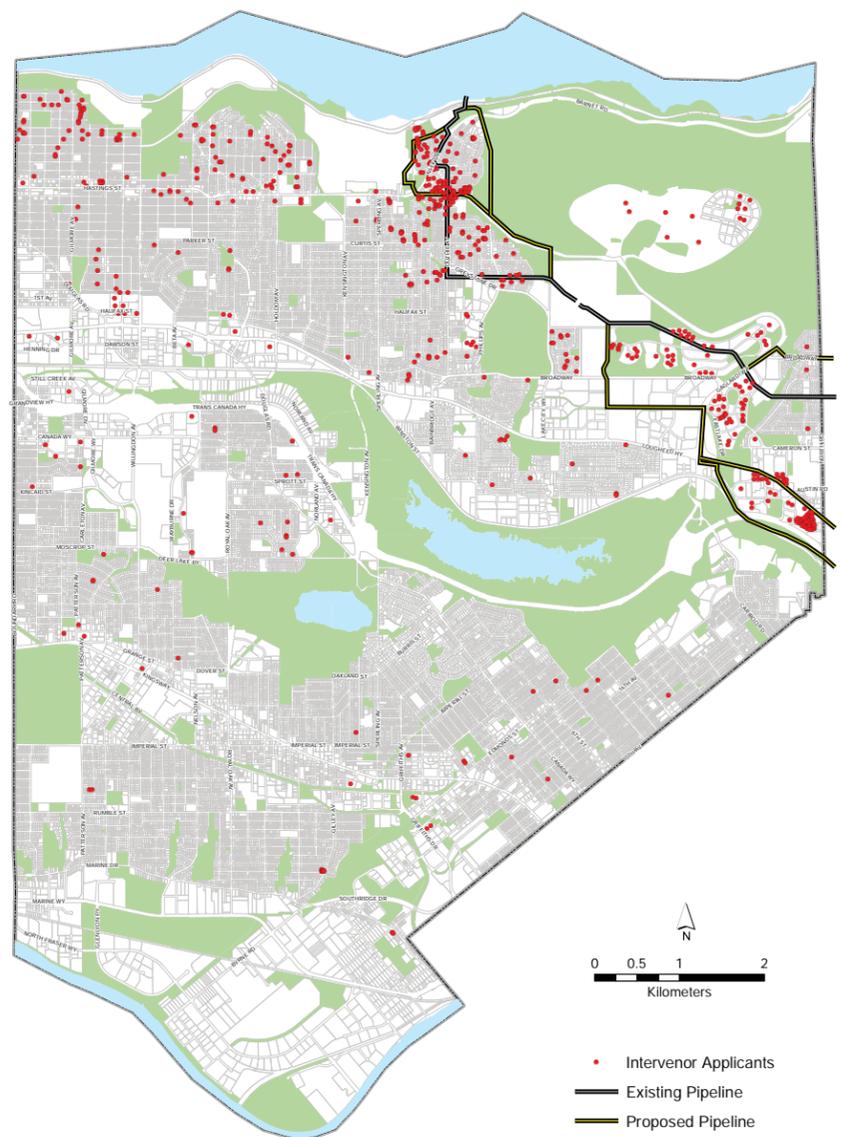
- file written evidence;
- ask written questions about Trans Mountain's and other intervenors' evidence;
- file, and potentially respond to, notices of motion;
- comment on draft conditions; and
- present written and oral argument.



"On February 3, 2014, the City of Burnaby applied for official intervenor status to oppose the Kinder Morgan Pipeline Expansion project. We oppose this pipeline proposal because of the significant negative impacts that its construction and operation would have on our City."

– MAYOR DEREK CORRIGAN

BURNABY'S INTERVENOR APPLICANTS



607 out of 623 intervenors plotted
8 out of 623 intervenor addresses could not be identified
8 out of 623 intervenor addresses were not in the City of Burnaby

623 BURNABY INTERVENOR APPLICANTS

173 BURNABY INTERVENOR APPLICANTS HAVE BEEN ACCEPTED AS INTERVENORS

441 BURNABY INTERVENOR APPLICANTS HAVE BEEN ACCEPTED AS COMMENTERS

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

LETS TALK ABOUT OUR ISSUES AND CONCERNS

The City of Burnaby's opposition to this project is framed by concern for our citizens, environment, and neighbourhoods from the detrimental impacts of Kinder Morgan's proposed project.

The proposal, if approved, could have significant immediate and long-term risk impacts to Burnaby and the surrounding Metro Vancouver region from an economic, environmental and community perspective. The proposal would also severely increase the potential risk of oil spills and environmental contamination of British Columbia's waterways and coastline.

The following panels outline a number of the issues, concerns, and impacts that the City has identified with Kinder Morgan's proposal:



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:



THE WRONG PROJECT IN THE WRONG LOCATION

Kinder Morgan's infrastructure and facilities within Burnaby are located in or adjacent to populated urban communities, increasing risks and conflicts between land uses, people, and activities.

The key issues associated with Kinder Morgan's proposal to expand their facilities and infrastructure are:

URBAN LOCATION

When the location for the terminal was selected in 1952, the land was achieved through expropriation and other means in Burnaby which was, at that time, largely rural and undeveloped. Since then, Burnaby has grown to become the third largest city in British Columbia. The population of the City has grown from approximately 58,000 in 1950 to over 235,000 in 2014. The proposal to expand heavy industrial uses in this location is not appropriate.



GEOGRAPHY

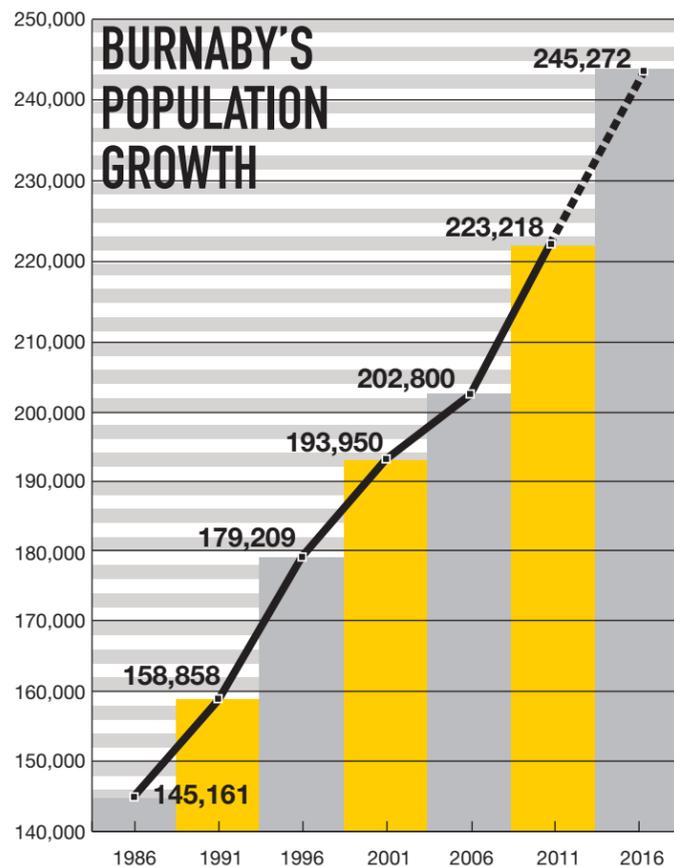
The infrastructure and facilities are inappropriately located on steep slopes, within watersheds, in areas that have challenging soil conditions, and within a high-risk seismic zone. Additionally, access for tankers to this location is limited by the Iron Workers Bridge at the Second Narrows and shallow waters. These factors increase the risk of accidents and incidents.

LACK OF BUFFER

The installation of these facilities and infrastructure have been imposed without appropriate buffers to protect and separate Burnaby's residents and neighbourhoods from this heavy industrial and high-risk use.

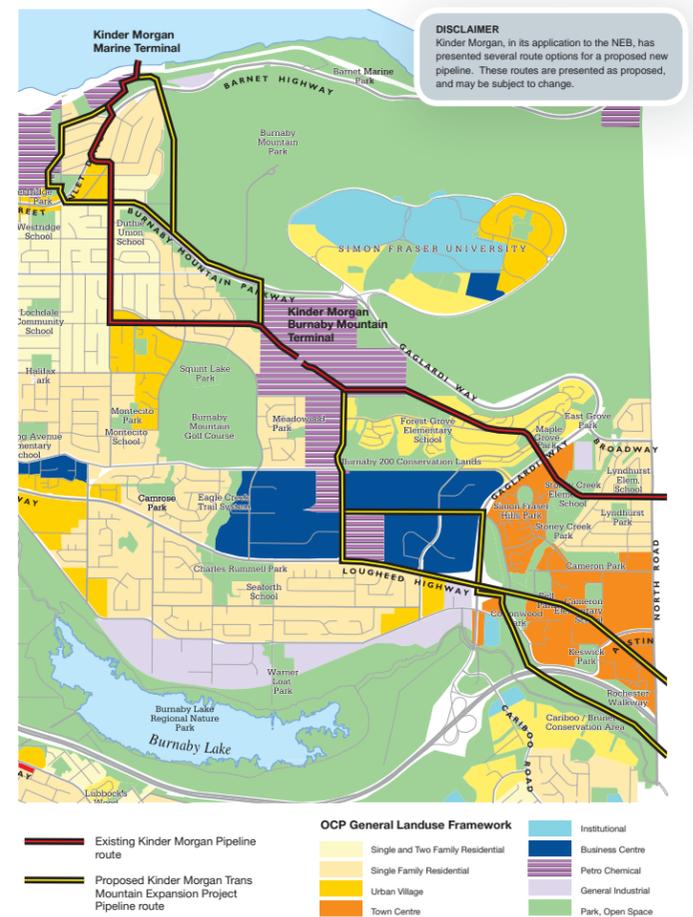
INCREASED RISK

The intensification and expansion of infrastructure and facilities will increase the overall risk and impacts to City residents, businesses, parks, and the environment.



RESTRICTIONS ON DEVELOPMENT

Where the pipeline runs under public streets and property or private property, the City and/or the property owner would be restricted from full access to civic infrastructure such as utilities. Kinder Morgan permission would be required to excavate or build on the subject properties, limiting or constraining access and use.



LIMITS TO DEVELOPMENT AND LAND USE POTENTIAL

The location of the proposed infrastructure and facilities would limit the development land use potential of surrounding sites. Not only would planning of these areas be restricted, but development directly adjacent to pipelines would not be permitted.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

WE WANT TO HEAR FROM YOU

ROUTE CONFUSION

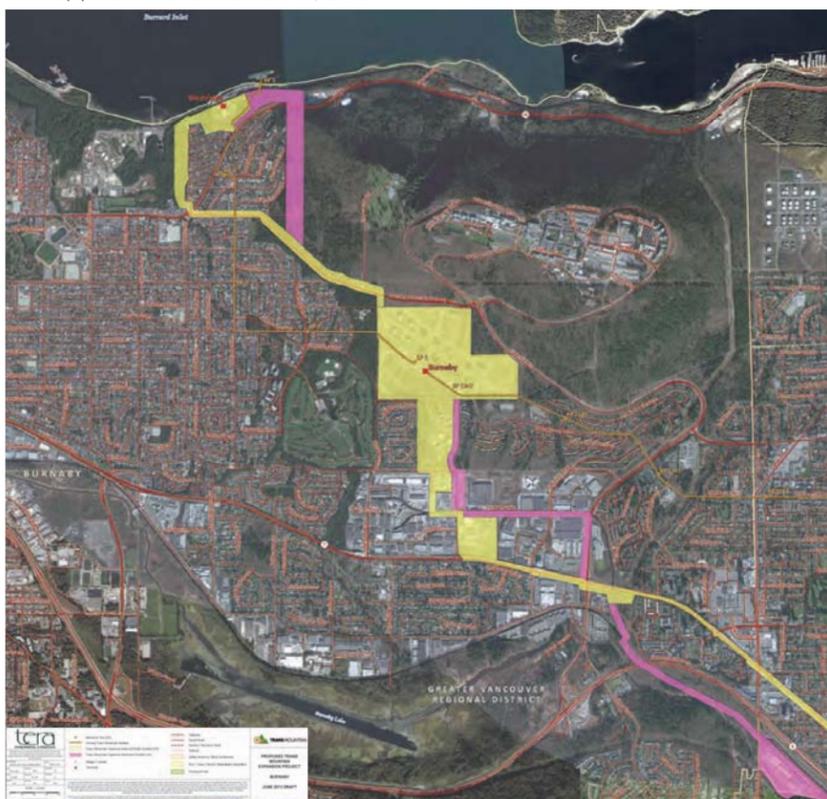
Kinder Morgan's proposed pipeline route(s) as indicated in its application to the NEB would require new rights-of-way throughout our urban neighbourhoods.

The key issues associated with Kinder Morgan's proposed route(s) are:

LACK OF CLARITY

The "selected" and "alternate" pipeline study corridors only provide a general indication of the proposed routing and alignment through Burnaby. The final pipeline route could potentially be outside of the study corridors.

ROUTE(S) INDICATED DECEMBER 16, 2013



DISCLAIMER

Kinder Morgan, in its application to the NEB on December 16, 2013, presented several route options for a proposed new pipeline. These routes are presented as proposed, and may be subject to change.

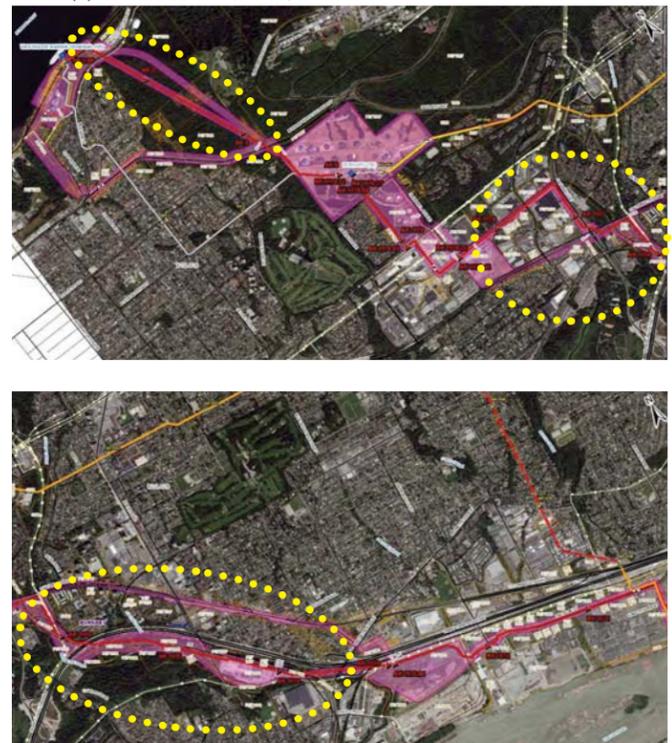
ROUTE(S) INDICATED MARCH 30, 2014



DISCLAIMER

This map indicates new proposed corridors presented on March 30, 2014 for the pipeline that were previously not indicated in Kinder Morgan's application to the NEB.

ROUTE(S) INDICATED MARCH 11, 2014



DISCLAIMER

The above two images show potential additional route(s) options that were indicated to the City on March 11, 2014, however, they are not indicated in Kinder Morgan's application.

ROUTE(S) INDICATED APRIL 3, 2014



DISCLAIMER

The above image shows potential additional route(s) options that were indicated at a Kinder Morgan public event on April 3, 2014. The selected and alternate routes have been switched. These adjusted routes are not indicated in Kinder Morgan's application.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:



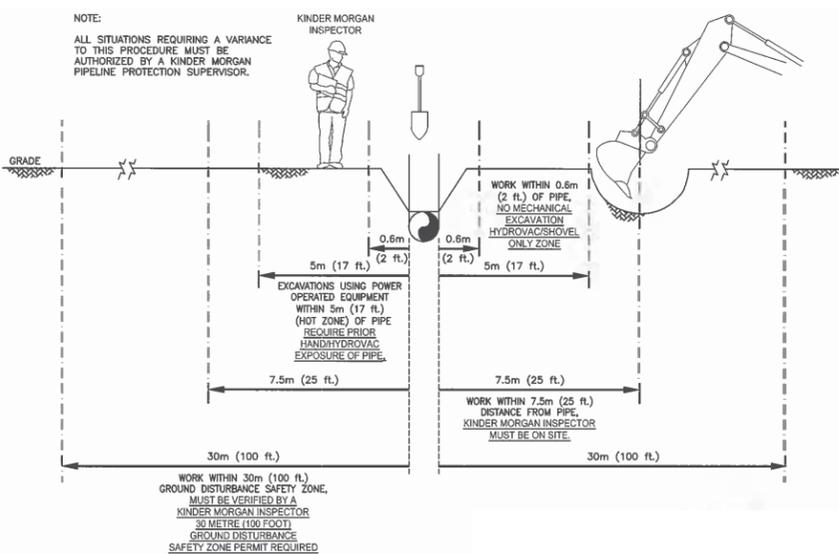
ACCESS CHALLENGES

Kinder Morgan's proposed pipeline route(s), as indicated in its application to the NEB, would require new rights-of-way throughout our urban neighbourhoods that would limit access to civic infrastructure and present challenges for both public and private properties.

The key issues associated with Kinder Morgan's proposed route(s) are:

ACCESS TO CIVIC INFRASTRUCTURE

The proposed pipeline route(s) follow major roads and transportation corridors. These corridors carry a significant volume of traffic (people and goods) each day. Below the surface of these corridors there are a wide range of City infrastructure and utilities (water, sanitary, storm and sewer) which are integral to the operations of the City as a whole. The routing of the pipeline within these corridors would pose significant immediate (during construction) and long-term risks, and potentially impact the City's ability to provide and maintain infrastructure and utility services.

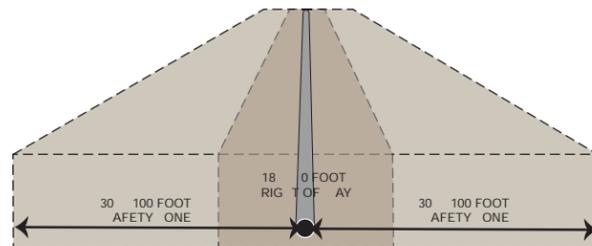


NEIGHBOURHOODS SURROUNDED BY PIPELINES

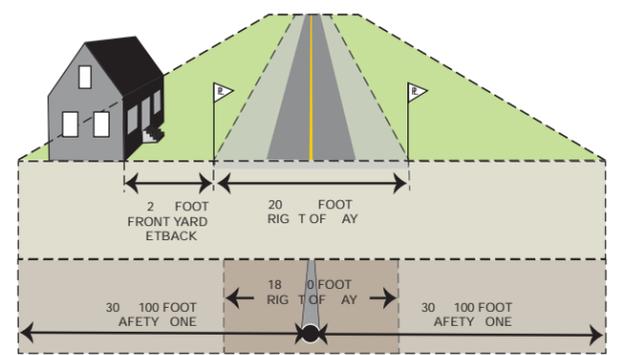
Creating new pipeline corridors in the City could create neighbourhoods, such as Westridge, which are surrounded by pipelines, increasing health and safety risks to residents. Kinder Morgan's application includes two additional distribution pipelines from Burnaby Mountain Terminal to the Westridge Marine Terminal.

SIZE OF RIGHT-OF-WAY

The proposed pipeline would require an 18-metre right-of-way with an additional 30-metre "safety zone" on either side. During construction, a 45-metre right-of-way is required, which would cause significant disruption to existing neighbourhoods and streets. In addition, if the proposed pipeline were located within an existing street right-of-way, the "safety zone" would encroach on existing homes.



PIPELINE RIGHT-OF-WAY AND "SAFETY ZONE"



COMPARISON OF STREET RIGHT-OF-WAY TO PIPELINE RIGHT-OF-WAY AND "SAFETY ZONE"

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

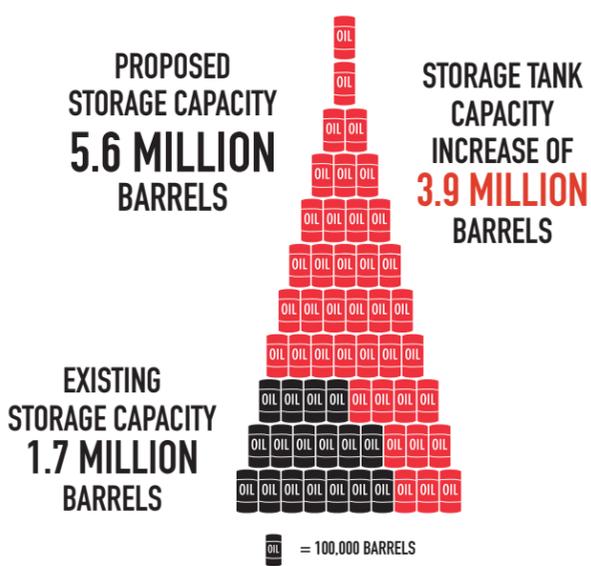
ISSUE:



BURNABY MOUNTAIN TERMINAL

Kinder Morgan's proposed expansion of Burnaby Mountain Terminal (tank farm), where the oil is stored before being shipped, would result in the tripling of oil storage capacity, increasing risk to Burnaby neighbourhoods.

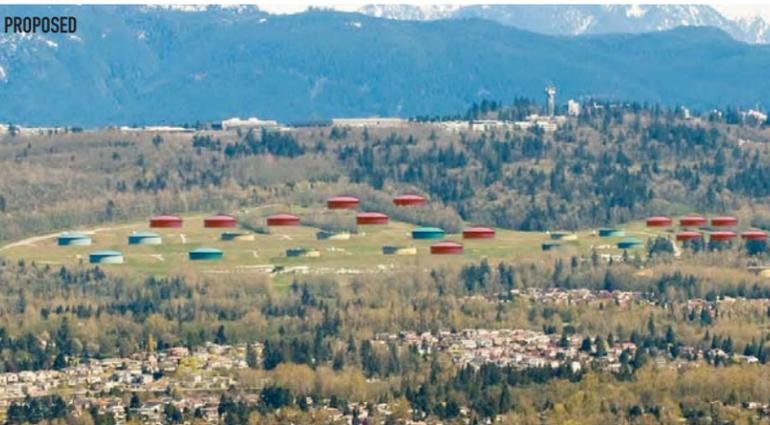
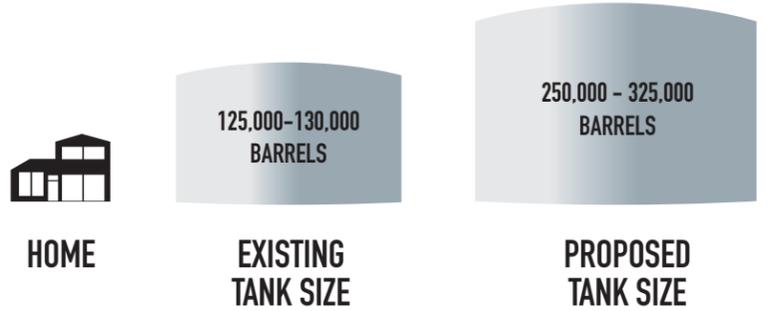
The key issues associated with Kinder Morgan's proposed expansion of Burnaby Mountain Terminal are:



INCREASED VOLUME EQUALS INCREASED RISK

The proposal increases the volume of oil stored at the Burnaby Mountain Terminal from 1.7 to 5.6 million barrels. This increase in volume inherently increases the risk and magnitude of an accident or incident.

INCREASED STORAGE CAPACITY VOLUME



VISUAL IMPACTS

The proposal would increase the number of oil storage tanks on Burnaby Mountain from 13 to 26. In addition, the new storage tanks would be much larger than the existing storage tanks. This would result in significant visual impacts to Burnaby Mountain.



WRONG / HAZARDOUS LOCATION

The location of the facility on a steep mountain slope, within a high risk seismic zone, and directly connected to two watersheds, comprises a significant risk to our community. Rather than increasing the risk to our City, the Kinder Morgan proposal should identify a new location better suited to their uses.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:



OIL IN OUR WATER

The proposed expansion of the Westridge Marine Terminal would increase the number of tankers in our coastal waters and significantly impact the Burrard Inlet.

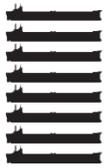
The key issues associated with Kinder Morgan's proposal to expand the Westridge Marine Terminal are:

INCREASED TANKER TRAFFIC

The proposed expansion will lead to increased tanker and barge traffic in the Burrard Inlet increasing the risk of accidents and spills. A clear outline of how the tankers and barges will be able to manoeuvre in the Inlet and an appropriate emergency plan have not been provided in the application.

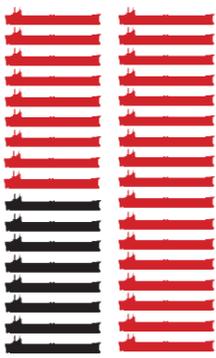
To date, Kinder Morgan has not responded with adequate information regarding the required increase of three tug boats per tanker for marine guidance.

EXISTING TANKERS



8 / MONTH

PROPOSED TANKERS



34 / MONTH



2007 BURNABY OIL SPILL
250,000 LITRES (1,572 BBL) WAS RELEASED

RISKS TO BURRARD INLET

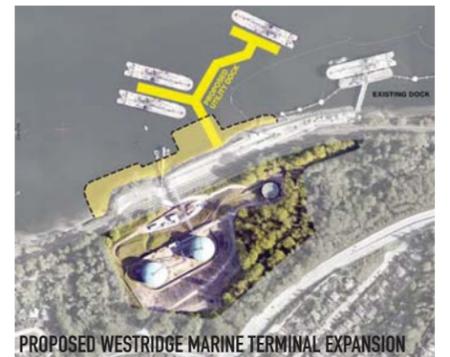
The proposal significantly increases the risk of an oil spill in Burrard Inlet. Even a small incident can have significant impacts on the marine environment and ecosystem. The effects would be far reaching and could impact all the municipalities that share these waters.

SHORELINE AND MARINE IMPACTS

The proposal includes addition of 1.4 hectares (3.5 acres) to their industrial site through the dumping of fill and rock into Burrard Inlet to accommodate an expanded marine terminal. This shoreline filling proposal does not include plans to improve the shoreline habitat or follow the standards set by the Department of Fisheries and Oceans.



KINDER MORGAN RENDERING OF PROPOSED WESTRIDGE MARINE TERMINAL EXPANSION



PROPOSED WESTRIDGE MARINE TERMINAL EXPANSION

RECREATION AND PARK IMPACTS

The increased tanker traffic would disrupt recreational boaters and beach users. In the event of a spill or leak, the beach and shoreline of Barnet Marine Park would be significantly harmed, resulting in the closure of parks and public amenities. There would also be significant economic impacts related to recreation and tourism.



BARNET BEACH



2007 BURNABY OIL SPILL
BURRARD INLET

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

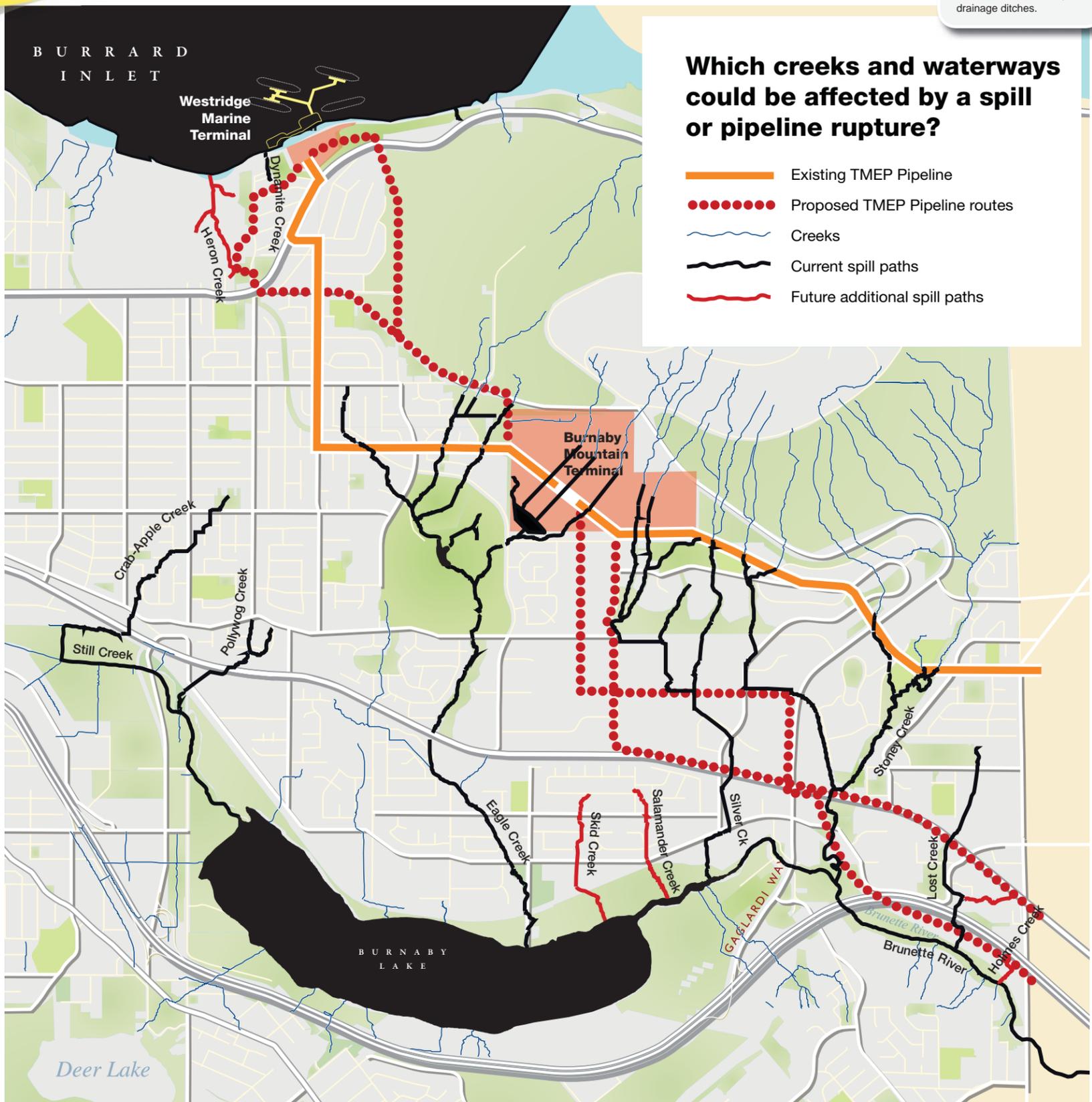
WE WANT TO HEAR FROM YOU!

WATERWAY SPILL IMPACTS

The location of the Burnaby Mountain Terminal (oil storage tank farm) and the pipeline within two watersheds increases the risk of oil entering the water system. This threat extends not just to Burnaby's Central Valley (including Burnaby Lake and Brunette River), but also to the Fraser River Estuary and the Burrard Inlet.

DID YOU KNOW?

Many of our creeks and streams are connected to the City's stormwater system. This means that a spill on land can still get into our water system via the storm drains and open drainage ditches.



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

WE WANT TO HEAR FROM YOU=

ENVIRONMENTAL IMPACTS

Kinder Morgan's proposal could have significant environmental impacts that would result in harm to all aspects of our environment, including water, air, soil, vegetation, and wildlife.

The key issues associated with Kinder Morgan's proposed expansion are:

DID YOU KNOW?

On land, an oil spill can appear as though the bulk of the damage happens quickly. However, the oil can move underground and continue to do low-level damage to wildlife and habitat over many years.



WATER

A number of the creeks and streams running through or near the locations of the facilities and infrastructure are nutrient bearing and feed into other water bodies that are fish bearing. In addition, the two watersheds that could be affected in the case of a spill or leak, lead into the Burrard Inlet, Burnaby Lake, Brunette River, and the Fraser River. Kinder Morgan has not fully accounted for all the watercourses and local watersheds, as well as the broader stormwater network (piped drainage and open ditches) in Burnaby that could be impacted by the Project.



AIR

The proposal would significantly impact Metro Vancouver's air quality and the livability of Burnaby's neighbourhoods. Air pollution concerns arise from the increased number of tankers, the off-gassing that occurs when tankers are being loaded, and the storage of oil at the Burnaby Mountain Terminal. Heavy crude oil has added solvents that evaporate into the air in the case of a spill. The solvents used include carcinogens that are highly toxic through either short- or long-term exposure and other neuro-toxins with proven health risks. In the case of a major spill, airborne contamination may lead to a required evacuation.



SOIL AND VEGETATION

Studies have shown that land-based spills can contaminate groundwater for many years and at distances up to thousands of metres from the spill source. The long-term effects of soil contamination associated with spills or leaks would result in lands requiring expensive remediation, limitations to future development opportunities, groundwater contamination, and the contamination of vegetation that would affect growing capability. These impacts can be exacerbated should the spill travel through the city's drainage systems.



WILDLIFE

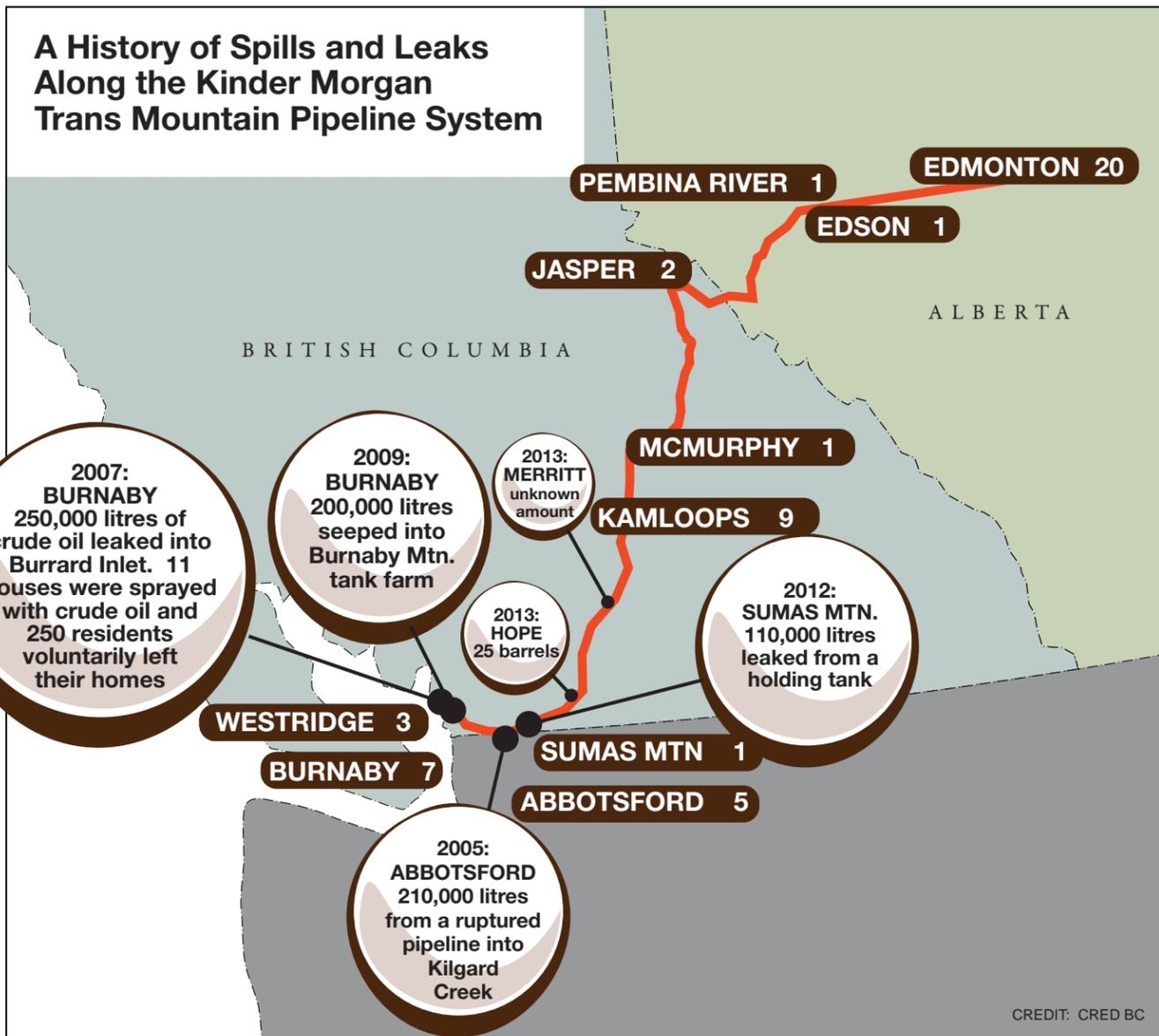
Heavy crude oil is toxic to all wildlife, difficult to cleanup and likely to persist for years in soils and vegetation. The overall impacts would be catastrophic, far-reaching, and long-lasting within any eco-system. In the case of the Exxon Valdez oil spill, and more recently the BP Deepwater Horizon oil spill and the Galveston Bay oil spill, chronic impacts have been noted in many species which continue to affect their survival.



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

OIL SPILLS HAPPEN



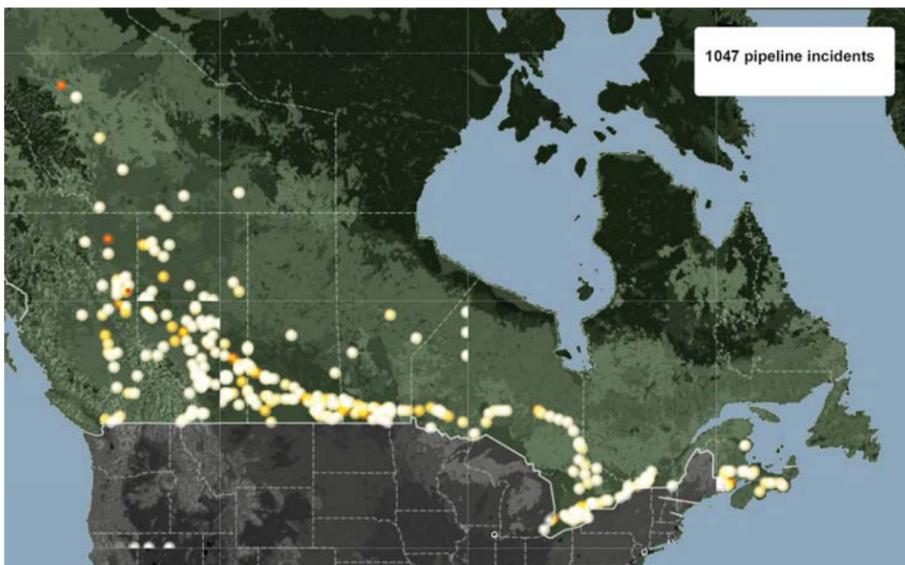
KINDER MORGAN HAS A HISTORY OF SPILLS

Kinder Morgan is a Houston, Texas based energy transport company that was formed in 1997. Since acquiring its network of pipelines across North America, they have established a poor safety record in a short period of time. The US National Response Centre "has found Kinder Morgan responsible for 1,800 violations since it was incorporated in 1997, nearly 500 of which are pipeline incidents." (CRED BC)

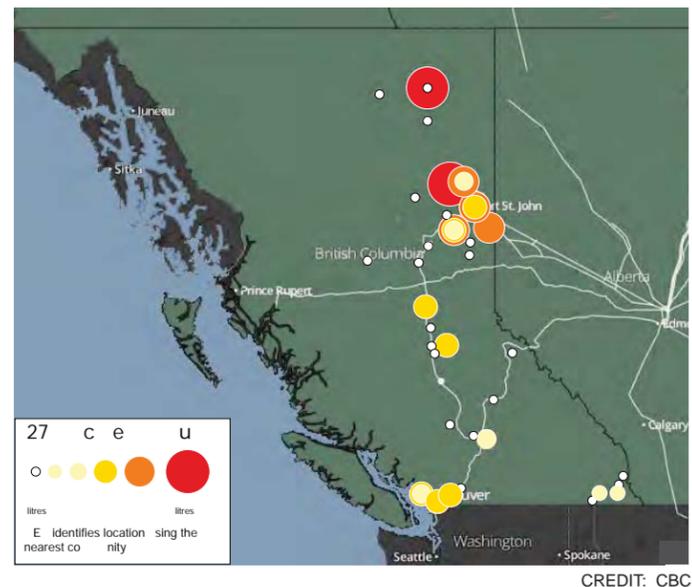
Since 1952, there have been a total 78 reported spills along the Trans Mountain Pipeline System. (CRED BC)



SPILL MAP OF CANADA



SPILL MAP OF BRITISH COLUMBIA



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

WE WANT TO HEAR FROM YOU=

KINDER MORGAN OIL SPILL EMERGENCIES IN BURNABY

THE ISSUE...

Burnaby has experienced oil spills and emergencies related to the Kinder Morgan Trans Mountain Pipeline.

In 2007, a road crew ruptured a pipeline on Inlet Drive in the Westridge neighbourhood, causing a spill of over 250,000 litres (1,572 barrels) of crude oil. This resulted in an emergency evacuation of 250 Burnaby residents and impacted 50 residential properties. The spill entered the Burrard Inlet through a storm sewer and affected 1,200 metres of shoreline, causing long-term impacts to ecosystems and wildlife. Cleanup took more than a year and the Transportation Safety Board ruled that the accident was the fault of Kinder Morgan and two contracting companies. The cost of the cleanup is estimated at over \$15 million.

In 2009, 200,000 litres seeped from a storage tank into a surrounding containment bay at the Burnaby Mountain tank farm, causing strong fumes locally and requiring extensive clean-up within the Kinder Morgan Burnaby Mountain Terminal (tank farm) site.

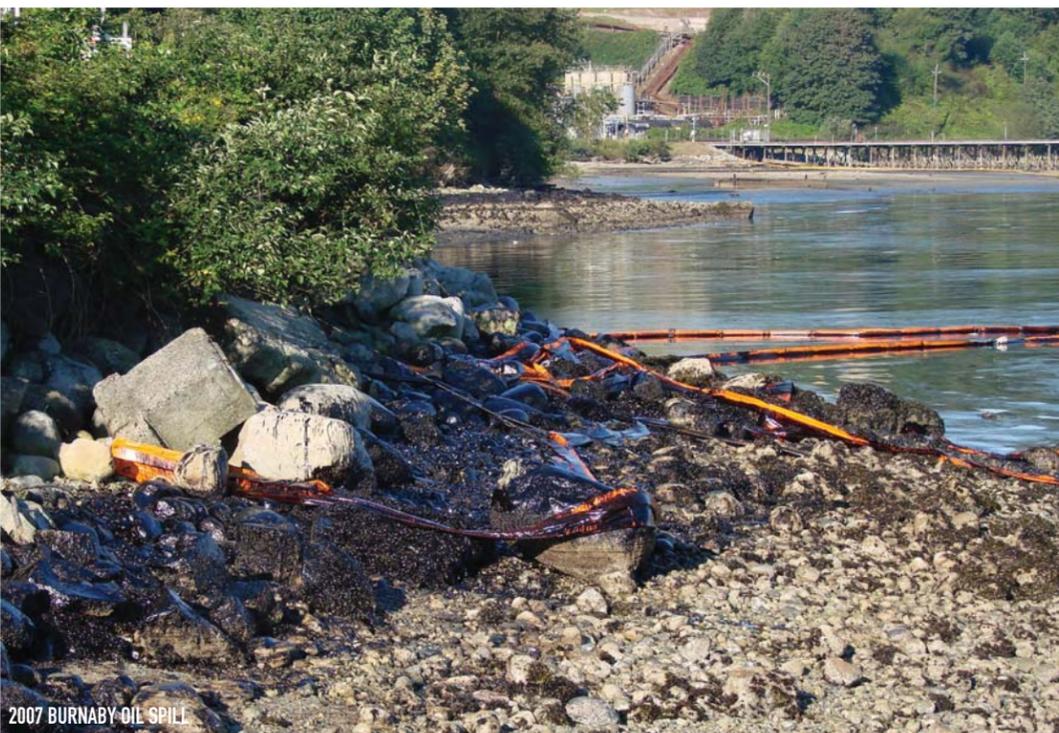
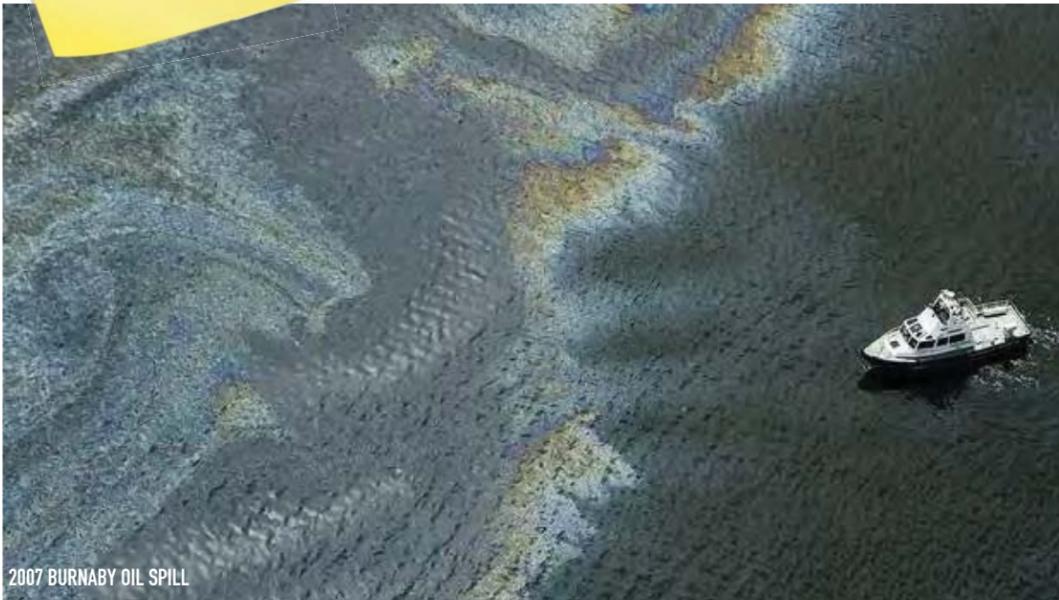


CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

WE WANT TO HEAR FROM YOU=

KINDER MORGAN OIL SPILL EMERGENCIES IN BURNABY



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

WE WANT TO HEAR FROM YOU-

IMPACTS ON OUR NEIGHBOURHOODS

Kinder Morgan's proposal will have significant impacts on our neighbourhoods throughout the lifespan of the project including the planning, construction, and operation of the Trans Mountain pipeline system.

The key issues associated with Kinder Morgan's proposed expansion are:



SOCIAL IMPACTS

The proposal would impact the ability to develop within affected neighbourhoods, and limit the City's ability to implement neighbourhood hubs, urban design improvements, and other community building efforts.

CONSTRUCTION IMPACTS

During the construction, large 45-metre rights-of-way will be required to accommodate Kinder Morgan's machinery, pipeline, and personnel. In addition to the noise, and general disturbance of local streets, residents and businesses could also be impacted without compensation.



QUALITY OF LIFE IMPACTS

Quality of life for residents and businesses would be diminished from the following:

- Noise and light pollution from the proposed increase in tanker traffic
- Construction noise, dust, and access issues
- Environmental impacts
- Personal and community health and safety impacts and concerns
- Stress from the uncertainty of the proposal



PIPELINE EASEMENTS

Kinder Morgan, under federal regulation, can receive right-of-entry to private and public properties and impose easements that, in effect, limit land use and development.



10-40%



LOSS OF PROPERTY VALUE

Studies show that pipelines impact property values by both direct contamination and the perception of contamination. In several documented cases where oil spills occurred, directly affected properties lost 10-40% of their value. Additionally, properties in proximity to an oil spill saw a 5-8% reduction in value.

Please note that, in the case of Burnaby's 2007 oil spill, the impacts to real estate values have yet to be studied.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:



ECONOMIC IMPACTS

**JOBS
AT RISK**
(UP TO 43% OF
THESE JOBS COULD BE
AFFECTED BY A SPILL)

THIS PIPELINE WOULD NOT CREATE ECONOMIC BENEFITS

Texas-based Kinder Morgan claims the pipeline would create jobs and benefit Burnaby's economy. In fact, the net impact of this pipeline on jobs in Burnaby and our economy would be negative. The pipeline would hurt hundreds of businesses that are responsible for economic development and quality of life in our thriving city. It would threaten our city's livability, limit development opportunities, ignore longstanding citizen-driven plans, and damage our environment. Its net effect would be to eliminate jobs, not to add them.

Kinder Morgan's application states:

"Pipeline spills can have both positive and negative effects on local and regional economies, both in the short and long term. Spill response and clean-up creates business and employment opportunities for affected communities, regions, and clean-up service providers. This demand for services and personnel can also directly or indirectly affect businesses and resource dependent livelihoods."

— KINDER MORGAN — ON JOBS THE NEW PIPELINE
COULD CREATE IN BURNABY

EMPLOYMENT BY SECTOR IN THE LOWER MAINLAND

REAL ESTATE AND PROPERTY DEVELOPMENT

121,143



TOURISM

93,578



CLEAN TECH

8,400



AGRICULTURE

4,814



INFORMATION COMMUNICATION TECHNOLOGY

36,600



FILM

36,000+



DIGITAL MEDIA

16,000



CREDIT: CRED BC

EXISTING JOBS AT RISK

If there were an accident or spill in Burnaby, there would be significant impacts to the local economy. Studies show that jobs in the real estate development, tourism, hospitality or coastal industries, high tech and film sectors, which rely upon the natural environment to support these careers, would be most at risk. These industries employ more than 320,000 people in the Lower Mainland.

NEW TAXES ARE NOT COMPENSATION

Kinder Morgan has, in its application, presented estimates of the benefits Burnaby would receive in the form of municipal tax revenues.

Taxes are not an extraordinary benefit to the City; they are part of doing business in our city. In addition, the value of these revenues does not compensate for the potential detrimental impacts of their facilities and infrastructure.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:

WE WANT TO HEAR FROM YOU

THREATS TO OUR PUBLIC HEALTH AND SAFETY

Kinder Morgan's proposal will significantly increase the threats to our community's public health and safety.

The key issues associated with Kinder Morgan's proposed expansion are:



POOR SIGNAGE AND INFORMATION

The proposal does not provide a comprehensive plan for forms of signage, marking, and labeling of existing and proposed pipelines and facilities within Burnaby.

LIMITED EMERGENCY RESPONSE PLAN

Kinder Morgan's application provides little to no information on who would be responsible, and what the protocols would be, if an emergency were to occur. Information on access, egress, evacuation, the provision of public announcements and information, etc., have not been clearly outlined.



LIMITED SAFETY AND SECURITY MEASURES

Kinder Morgan, in their application, does not adequately respond to potential risks associated with the safety and security of the pipeline, Burnaby Mountain Terminal, and Westridge Marine Terminal facilities, including willful acts of violence, vandalism, and trespassing.



TOXINS AND ENVIRONMENTAL RISKS

Public health and safety are at risk from the increased potential for toxins to escape into the soil, air, and water, and would affect vegetation and wildlife.



EARTHQUAKES AND SEISMIC EVENTS

In the event of an earthquake or seismic event, the pipeline infrastructure and facilities would be at risk of spill, leak, rupture or fire. There is little information provided as to how the infrastructure and facilities would be designed to withstand a seismic event or what mechanisms would be in place to protect against these events. In addition, there is little information and no updated emergency response plan provided on how residents near the facilities and infrastructure would be protected.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

ISSUE:



INADEQUATE EMERGENCY RESPONSE PLAN

The emergency response plan outlined in Kinder Morgan's application is minimal, relies on City of Burnaby resources, and does not clearly articulate a plan for the inherent risks and emergencies associated with the facilities and infrastructure.

The key issues associated with Kinder Morgan's proposed expansion are:



LIMITED EMERGENCY RESPONSE PLAN

There is little to no information on who would be responsible if an emergency were to occur. The emergency protocols and how to exercise those protocols are not clearly articulated. There is a heavy reliance on City services and infrastructure without appropriate training, information, and a clear delineation of roles and responsibilities.



RELIANCE ON CITY SERVICES

In the event of an accident, spill, leak, or fire, the proposed expansion project would require the use of City services and first responders such as Burnaby Fire Department, Burnaby RCMP, civic emergency services, etc. The use of City infrastructure, such as access to the City's water supply, is also expected. In addition, a City response to the incident would deplete Burnaby's overall response capacity and could severely restrict the ability to respond to other emergencies affecting citizens within the City.



LIMITED CLEANUP RESPONSE PLAN

In the event that an accident, spill, leak, or fire occurs, the cost and management of a cleanup effort has not been clearly defined.



LIMITED EMERGENCY RESPONSE CAPACITY

Traditionally, the oil industry in Burnaby has maintained their own personnel to respond to emergencies within their own facilities. However, Kinder Morgan proposes to download these responsibilities to City emergency responders. The application does not adequately address the need for additional emergency response capacity, including additional on-site personnel. Additionally, the proposal does not present adequate compensation or response education, etc., to the City for the use of civic emergency services.



LIMITED MARINE EMERGENCY RESPONSE PLAN

Responsibility for the cleanup of spill incidents within the Burrard Inlet would fall on the individual, group or corporation responsible for spill, up to a maximum liability of \$1.3 billion. The spill cleanup costs that exceed this amount would likely be borne by the Canadian government.

Kinder Morgan has no legal obligation to cleanup or pay for the cost of cleanup for spill incidents that occur within the Burrard Inlet once the oil tanker leaves the Westridge Marine Terminal. Kinder Morgan has not prepared a marine spill response plan to address the issue, nor has Kinder Morgan committed to any formal assistance (cleanup or monetary) in event of a spill incident, despite the fact that the Project would increase marine traffic from eight tankers per month to 34.

CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL

RECENT ACCIDENTS DESPITE ASSURANCES OF SAFETY

2010 SAN BRUNO PIPELINE EXPLOSION
SAN BRUNO, CALIFORNIA, (A SUBURB OF SAN FRANCISCO)



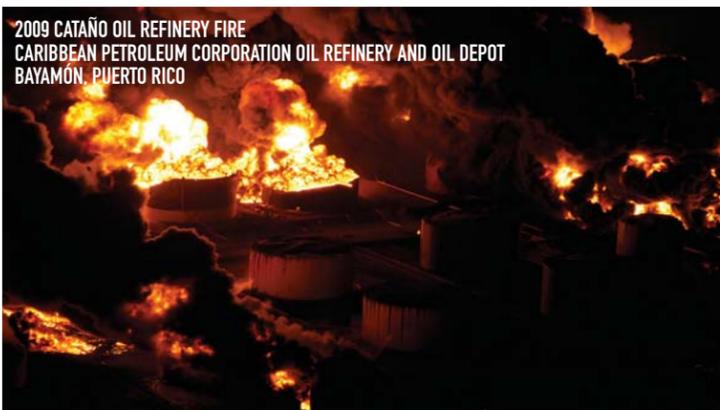
2010 SAN BRUNO PIPELINE EXPLOSION
SAN BRUNO, CALIFORNIA, (A SUBURB OF SAN FRANCISCO)



2010 SAN BRUNO PIPELINE EXPLOSION
SAN BRUNO, CALIFORNIA, (A SUBURB OF SAN FRANCISCO)



2009 CATAÑO OIL REFINERY FIRE
CARIBBEAN PETROLEUM CORPORATION OIL REFINERY AND OIL DEPOT
BAYAMÓN, PUERTO RICO



2009 CATAÑO OIL REFINERY FIRE
CARIBBEAN PETROLEUM CORPORATION OIL REFINERY AND OIL DEPOT
BAYAMÓN, PUERTO RICO



CITY OF BURNABY OPPOSES KINDER MORGAN PIPELINE PROPOSAL



PANEL
31

Visit www.burnaby.ca/tmep for further information

THANK YOU

As the City develops its response to Kinder Morgan's proposed Trans Mountain Expansion Project, we would like to hear about your concerns and questions related to the impacts and issues with the proposal.

Your comments and input will be collected to ensure that the City's ongoing response to this project is reflective of your views.

Please fill out a public input form.



YOU CAN STAY INFORMED BY:



Checking our website:
www.burnaby.ca/TMEP



Friending us on Facebook:
www.facebook.com/cityofburnaby



Following us on Twitter:
[@cityofburnaby](https://twitter.com/cityofburnaby)

YOU CAN CONTACT THE CITY OF BURNABY VIA:

In-person: Burnaby Engineering Department
4949 Canada Way (4th floor)

Email: TMEPInquiry@burnaby.ca

Phone: 604-297-4400

Fax: 604-294-7425

Mail: Burnaby Engineering Department
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