



TRANS MOUNTAIN

DISCUSSION GUIDE



PROPOSED TRANS MOUNTAIN EXPANSION PROJECT

PUBLIC INFORMATION SESSIONS

OCTOBER – DECEMBER 2012

November 15, 2012

KINDER MORGAN
CANADA

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ABOUT THIS DISCUSSION GUIDE

The purpose of this discussion guide is to provide you with information and facts about the proposed expansion of the Trans Mountain Pipeline system. The guide offers an overview and outline of the proposed project to give you a greater understanding of its scope and help answer any questions you may have.

We encourage you to fill out the feedback form included with this guide or let us know your thoughts through the other options listed below. The input and advice from local interests is essential and we will consider every comment and concern.

WAYS TO PARTICIPATE IN THE ENGAGEMENT PROCESS

- Discussion guide and feedback form
- Public information sessions
- Stakeholder meetings
- Online feedback form
- Written submission by email or mail
- Online forums, discussions and surveys

ABOUT OUR COMMUNITY ENGAGEMENT

An open, extensive and thorough engagement process on all aspects of the proposed Trans Mountain Expansion Project is underway along the pipeline corridor between Strathcona County, Alberta (near Edmonton) and Burnaby, British Columbia and the marine corridor. We are reaching out to all landowners along the pipeline and meeting with community leaders, elected officials, environmental groups and Aboriginal peoples to get their input and perspective.

Information sessions and public presentations provide opportunities for public input and queries. We are listening and responding so we can decide the best approaches to any issues that arise. We remain committed to earning your trust and confidence.



COMMUNITY ENGAGEMENT TIMELINE

Late Spring/Early Summer 2012: Project Introduction

Meetings with Aboriginal peoples, municipalities, elected officials and interest groups took place to introduce the project, identify interests and concerns and seek input on how to engage communities.

Fall 2012: Public Information Sessions

We are conducting public information sessions in communities along the project corridor to introduce the project, identify local interests and concerns and to seek input on the scope of the Environmental and Socio-Economic Assessment (ESA).

Comments received in the fall 2012 engagement process will be compiled and reported in early 2013 on the project website at www.transmountain.com.

Winter/Spring 2013: Continued Community Engagement

We will conduct regional discussions on specific topics of interest to communities such as environmental assessment, socio-economic assessment, routing and marine environmental studies.

Summer/Fall 2013: Public Information Sessions

We will conduct public information sessions on the results of environmental field studies and seek input on proposed mitigation measures.

GATHERING FEEDBACK

Feedback received from public information sessions, meetings and comment forms will be used by the Trans Mountain Expansion Project team to help inform the following aspects of the project:

- Identifying routing alternatives where it is not practical to follow the existing Trans Mountain right-of-way
- Determining the scope and nature of the Environmental and Socio-Economic Assessment
- Identifying potential mitigation measures to reduce environmental or socio-economic impacts
- Identifying potential local or regional benefits associated with the project

All comments and concerns gathered as part of the stakeholder engagement program will be incorporated into the project's Facilities Application which will be filed with the National Energy Board (NEB) in late 2013. These comments and concerns will be considered by the NEB in making its final determination regarding the proposed project.



ABORIGINAL ENGAGEMENT

- The Trans Mountain Pipeline crosses many Aboriginal territories
- Trans Mountain values its relationships with Aboriginal peoples in whose territories we operate
- We recognize and appreciate that Aboriginal peoples' interests and responsibilities are unique
- We are committed to working with Aboriginal communities in a spirit of co-operation to build and sustain lasting relationships
- We are committed to working with Aboriginal communities and Aboriginal companies in the planning and construction of the proposed project
- We are engaging with Aboriginal people, where traditional knowledge of the land and its people can help Trans Mountain build a better project
- We actively encourage Aboriginal contractors to bid on our contracting opportunities, including joint-venture partnerships with other local service providers, to expand the resource pool available in BC and Alberta



LANDOWNERS ALONG THE TRANS MOUNTAIN PIPELINE

- Trans Mountain has established relationships with landowners, neighbours and communities along the pipeline corridor developed over the 60 years we have operated the pipeline
- Along the 1,150-km route, the Trans Mountain Pipeline crosses a large number of private properties, as well as public lands
- Agreements are in place with landowners along the route between Strathcona County, Alberta (near Edmonton) and Burnaby, BC that have allowed Trans Mountain to build and operate the existing pipeline
- For the proposed expansion project, we will be contacting landowners to obtain permission to conduct environmental and engineering studies and to answer questions about the project
- Once the route is selected, land agents will visit all landowners to discuss pipeline location on their land and to negotiate land agreements to enable Trans Mountain to construct and operate the new pipeline
- Through negotiated land acquisition agreements, landowners grant pipeline companies the right to use land to build, operate and maintain pipelines



- Trans Mountain's objective is to treat each landowner fairly and equitably
- The National Energy Board (NEB) has produced a guide for landowners and the public that provides details about the regulatory process governing pipeline projects
- This information is available on the NEB website at www.neb-one.gc.ca



HISTORY OF TRANS MOUNTAIN

- For almost 60 years, the Trans Mountain Pipeline system has been safely and efficiently providing the only West Coast access to Canadian oil products
- The Trans Mountain Oil Pipeline Company was established in 1951 to construct and operate the Trans Mountain Pipeline between Strathcona County, Alberta and Burnaby, BC
- In operation since October 1953, the Trans Mountain Pipeline was established to create a reliable energy supply for Canada and the United States
- The initial capacity was 150,000 barrels per day with 4 pump stations along the line and a marine loading dock
- Since 1953, the capacity of the pipeline system has been increased a number of times by twinning parts of the line and adding associated facilities
- The most recent expansion of the Trans Mountain pipeline was the award-winning Anchor Loop Project, completed in 2008, through Jasper National Park and Mount Robson Provincial Park



TRANS MOUNTAIN – CURRENT OPERATIONS

The Trans Mountain Pipeline originates in Strathcona County near Edmonton where petroleum products are received and stored in the Edmonton terminal for injection into the pipeline.

The products are then transported along the line to terminals and refineries in Kamloops, Burnaby and Washington State.

The Burnaby Terminal is connected by pipeline to the Westridge Marine Terminal in Burnaby, which is the only western Canadian marine loading facility connected to a federally-regulated pipeline.

Kinder Morgan Canada does not own the products that are transported through the Trans Mountain Pipeline. The products belong to its customers.

INDUSTRY AND PRODUCTS IN THE PIPELINE

- Pipelines transport oil (light and heavy crude), refined products and natural gas over long distances, from producing regions of Canada to refineries and processing plants, where these energy sources are converted into useful fuels such as gasoline, diesel and commercial-grade natural gas



- Petroleum products include:
 - Fuels we use every day, such as gasoline, aviation fuel, diesel and heating oil
 - Solvents and lubricants
 - Raw materials for manufacturing other petrochemicals
 - Products used every day such as plastics, synthetic fabrics and electronics
- For more information on Canada's petroleum industry, visit the Canadian Association of Petroleum Producers (CAPP) website at: www.capp.ca
- The Trans Mountain Pipeline is part of Canada's 100,000-km underground pipeline network that transports almost all of Canada's daily crude oil and natural gas production
- For more information on Canada's pipeline industry and infrastructure, visit the Canadian Energy Pipeline Association (CEPA) website at: www.cepa.com



ABOUT THE TRANS MOUNTAIN EXPANSION PROJECT

After receiving strong commitments from its customers, Trans Mountain, in April 2012, announced a proposed expansion of the Trans Mountain Pipeline system between Strathcona County (near Edmonton) and Burnaby.

In operation since 1953, the 1,150-km existing Trans Mountain Pipeline system, owned by Kinder Morgan Canada, has been operating safely and efficiently providing the only West Coast pipeline access for Canadian oil products, including being the major transporter of gasoline to the interior and south coast of British Columbia.

If approved, the proposed Trans Mountain Expansion Project would add approximately 900 km of new, twinned pipeline that would increase the nominal capacity of the system from 300,000 barrels per day to 750,000 barrels per day. Where practical, the routing of the proposed expansion will remain within the existing Trans Mountain Pipeline right-of-way.

National Energy Board Process

The NEB will run its own engagement process once Trans Mountain's Facilities Application has been filed. Through this process, the NEB will solicit input and comments from the public on the proposed project.

In making a recommendation to the federal cabinet whether the proposed Trans Mountain Expansion project should proceed, the NEB reviews the project's economic, technical and financial feasibility, and its environmental and socio-economic impact. The NEB will consider all comments gathered during Trans Mountain's pre-application engagement program as well as comments submitted to the NEB during the regulatory review phase.



Project at a Glance

- The projected capital cost of the project is \$4.1 billion
- Twinning the existing pipeline would take place within the existing right-of-way corridor where practical, minimizing construction impact in new areas
- Proposed expansion of the Trans Mountain Pipeline would increase the nominal capacity of the system from 300,000 barrels per day to 750,000 barrels per day
- The expansion would result in a dual-line operation (approximately 900 km of new pipeline) with:
 - The existing line for refined products, synthetic crude oils, light crude oils
 - The proposed new line for heavier oils
- New pump stations and expansion of existing stations along the route with 13 new/co-located stations
- Additional storage capacity at existing storage terminals in Strathcona County, Sumas and Burnaby
- Expansion of Westridge Marine Terminal in Burnaby
- New pipeline capacity between Burnaby Terminal and Westridge Marine Terminal



Numbers based on preliminary estimate, subject to change



TRANS MOUNTAIN EXPANSION PROJECT TIMELINE

In April 2012, Kinder Morgan Canada announced it will proceed with its proposed plans to expand the capacity of the existing Trans Mountain system after receiving strong commitments from its customers. Here is a look at the key activities and estimated timeline that will unfold over the next five years.



LATE SPRING/EARLY SUMMER 2012:

Meetings and discussions began with regulators to define the process and determine the regulatory requirements needed for the expansion Facilities Application. Initial meetings with Aboriginal peoples, landowners, communities and stakeholders.



SUMMER 2012:

Engagement with Aboriginal peoples, landowners, communities and stakeholders took place in summer 2012 and is continuing. On June 29, 2012, Trans Mountain filed a Toll Application with the National Energy Board. The Toll Application is Trans Mountain's proposed tolling structure for its customers on the proposed expanded pipeline system. This application does not seek approval for the proposed expansion facilities and does not involve technical or environmental aspects of the proposed expansion project. The focus of the Toll Application is to seek approval from the National Energy Board regarding how Kinder Morgan Canada will charge its customers for moving product through the proposed expanded pipeline.



JUNE 2012 TO SPRING 2013:

*** WE ARE HERE IN THE PROCESS.** Continue open and transparent engagement. Undertake comprehensive pipeline routing studies, traditional knowledge studies, environmental and socio-economic assessments.



LATE 2013:

The goal is to file a comprehensive Facilities Application with the National Energy Board in late 2013 to start a regulatory project review. The timing will be determined by meeting the established regulatory requirements that govern the application process and consultation efforts. Continue open and transparent engagement.



2014 TO 2015:

Regulatory review. Continue open and transparent engagement.



2016 TO 2017:

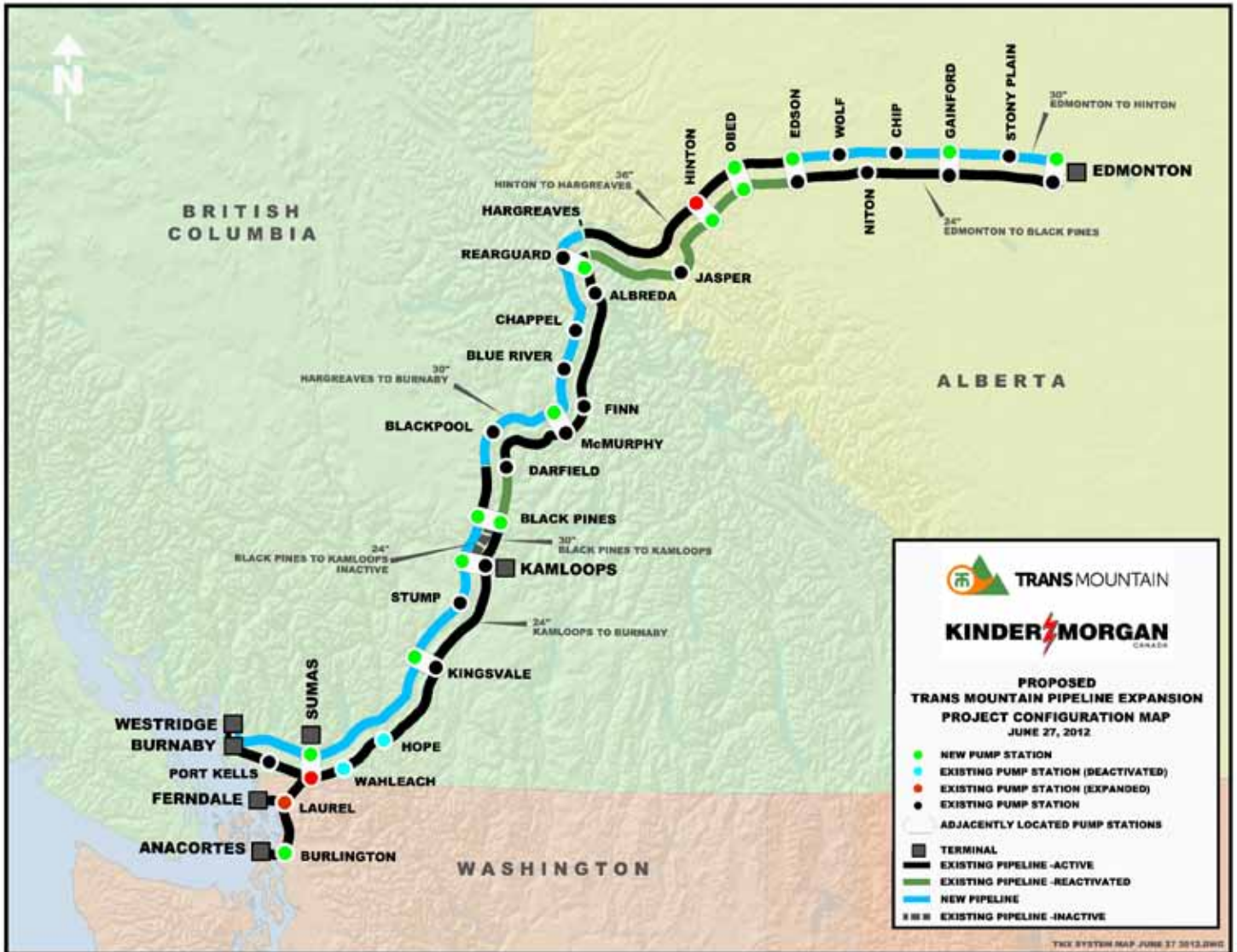
If the project is approved, construction of the proposed expansion could begin. Continue open and transparent engagement.



2017:

If approved, the proposed expanded Trans Mountain Pipeline to start operating.

PROPOSED EXPANSION MAP





TRANS MOUNTAIN EXPANSION PROJECT OVERVIEW

- Proposed expansion: approximately 900 km of new pipeline along the existing Trans Mountain Pipeline system between Strathcona County, Alberta (near Edmonton) and Burnaby, BC
- Increased nominal capacity from 300,000 barrels per day to 750,000 barrels per day
- Customers have signed 20-year contracts with Trans Mountain for much of the extra capacity
- Proposed dual-line operation
 - The existing line: refined products, synthetic crude oils, light crude oils
 - The proposed new line: heavier oils
- New 30-inch pipeline proposed in the following areas:
 - Strathcona County, Alberta to Edson, Alberta
 - From Rearguard, BC to Darfield, BC
 - From Black Pines, BC to Burnaby, BC
- New 36-inch pipeline proposed for Hargreaves, BC to Rearguard, BC
- Two new 30-inch delivery lines planned from the Burnaby Terminal to the Westridge Marine Terminal
- Existing pipelines to be reactivated:
 - Edson, Alberta to Hargreaves, BC
 - Darfield, BC to Black Pines, BC
- Project cost: approximately \$4.1 billion



Numbers based on preliminary estimate, subject to change

PROPOSED FACILITIES

Pump Stations



- 9 new pump stations at existing locations
- 4 new pump stations located at 2 new sites

Storage Tanks



- 18 new storage tanks at 3 existing storage terminals in:
 - Strathcona County, Alberta
 - Burnaby, BC
 - Sumas, BC
- All new storage tanks are expected to be built within existing facility boundaries

Westridge Marine Terminal



- 3 loading berths: total of 3 berth faces
- 1 utility berth with spill response equipment and utility tugs



PIPELINE SPECIFICATIONS



- Oil pipelines are made from steel with a diameter typically ranging from 4 to 48 inches
- Trans Mountain will use 30-inch pipe for most of the proposed expanded pipeline
- Trans Mountain will use pipe manufactured from high-grade steel to stringent Canadian Standards Association (CSA) and American Petroleum Institute (API) specifications in the proposed pipeline expansion
- CSA tightly regulates requirements for steel chemistry, material properties, manufacturing tolerances and quality control
- With a strong focus on inspection and maintenance, pipelines have an indefinite lifespan

BUILDING A PIPELINE – Step by Step

Surveying and Staking: After finalizing a route, crews survey and stake the right-of-way and any temporary workspace needed for construction.

Clearing: Trees and vegetation are removed from the right-of-way.

Grading: Area is cleared and graded. The topsoil is removed and stockpiled for replacement and future reclamation.

Trenching: Excavators dig the trench to the required depth. Pipelines are buried in trenches that are generally a minimum of 0.9 metres deep, depending on sub-surface conditions.

Stringing: Individual lengths of pipe ranging from 12 to 24 metres long are laid out end-to-end along the right-of-way.

Bending: Individual joints of pipe are bent using a hydraulic bending machine for directional changes and to fit the terrain.

Joining: Welders join the pipes together with either manual or automated welding processes. All welds are tested using high-tech methods such as X-ray or ultrasound.

Coating: The pipeline coating protects against corrosion. The pipeline is delivered to the right-of-way pre-coated. Field application coating is applied to welded joints.

Lowering: The welded pipeline is lowered into the trench with heavy lifting machines called side booms.

Valves and Fittings: Valves and other fittings are installed at intermediate locations as required by the CSA pipeline code. The valves are used once the line is operational to isolate the pipeline for maintenance or in the event of an emergency.

Backfilling: Soils are replaced in the order in which they were removed.

Pressure Testing: Pipelines are hydrostatically tested to 125 per cent of the anticipated operating pressure.

Cleanup: The pipeline right-of-way is reclaimed. Temporary facilities are removed. The land is re-contoured and re-seeded as part of restoration.





PROJECT BENEFITS

- The project will provide benefits to Canadians by creating jobs and government revenues and contributing to Canadian businesses and to the overall economy
- Most economic benefits will occur in BC and Alberta and will include opportunities for communities along the route
- The project will provide an important boost to the BC and Alberta construction industries
- The proposed Trans Mountain Expansion Project will allow Canada to promote its resources on the world market where oil commands world pricing
- Access to Tidewater markets is anticipated to boost the oil price for Canadian producers by a total of \$28 billion in the first 10 years

LOCAL BENEFITS

- Substantial expenditures, jobs and economic spinoffs in BC and Alberta communities in project development and during construction
- Training and skills development that will build capacity for Aboriginal workers
- Contracting, employment and vendor opportunities for local and regional businesses
- Investments and advancements in areas such as pipeline development and spill response
 - o Example: \$250,000 contribution to BCIT Marine Simulation Centre
- Trans Mountain is looking for feedback and ideas on how your community could participate in and benefit from the expansion project

BCIT Marine Simulation Centre



ECONOMIC IMPACTS

Trans Mountain has conducted preliminary analyses of the potential economic impact of the project (all numbers are approximate)

Estimated Direct Expenditures:

- \$4.1 billion during design and construction (2012 – 2018)
 - o \$2.6 billion in BC and \$1.5 billion in Alberta
- \$3.6 billion during operations (2019 – 2048)
 - o \$2.5 billion in BC and \$1.1 billion in Alberta

Estimated Employment:

- 47,200 person-years of employment generated (full-time equivalents) during construction and operations (2012 – 2048)
 - o 27,200 person-years in BC
 - o 11,500 person-years in Alberta
 - o Plus indirect/induced employment in other provinces and territories
- Expanded operations: 35 new permanent full-time jobs in BC and 29 in Alberta

Estimated Tax Revenues:

- \$811 million for Government of Canada over life of project
- \$557 million for provincial governments over life of project (\$320 million for BC, \$145 million for Alberta and \$93 million for rest of Canada)

- \$600 million increased municipal property taxes during operations
 - o \$535 million in BC (\$19.9 million annually)
 - o \$64 million in Alberta (\$2.4 million annually)
- Trans Mountain is assessing expected local economic benefits to communities along the pipeline route – when complete, information will be shared



These estimates may change as project details are refined



PIPELINE ROUTING

Objectives in Determining Route Options:

- Build the proposed new pipeline safely, while minimizing impacts to landowners and neighbours
- Follow the existing Trans Mountain Pipeline right-of-way, where practical

Significant changes in land use and urban growth since the original pipeline was built will require identifying new routing options in some locations

Route Considerations:

- Follow established transportation and utility corridors
- Minimize impact on landowners
- Minimize impact on environment
- Minimize constraints on municipal infrastructure
- Minimize impact on public
- Minimize impact on Aboriginal communities

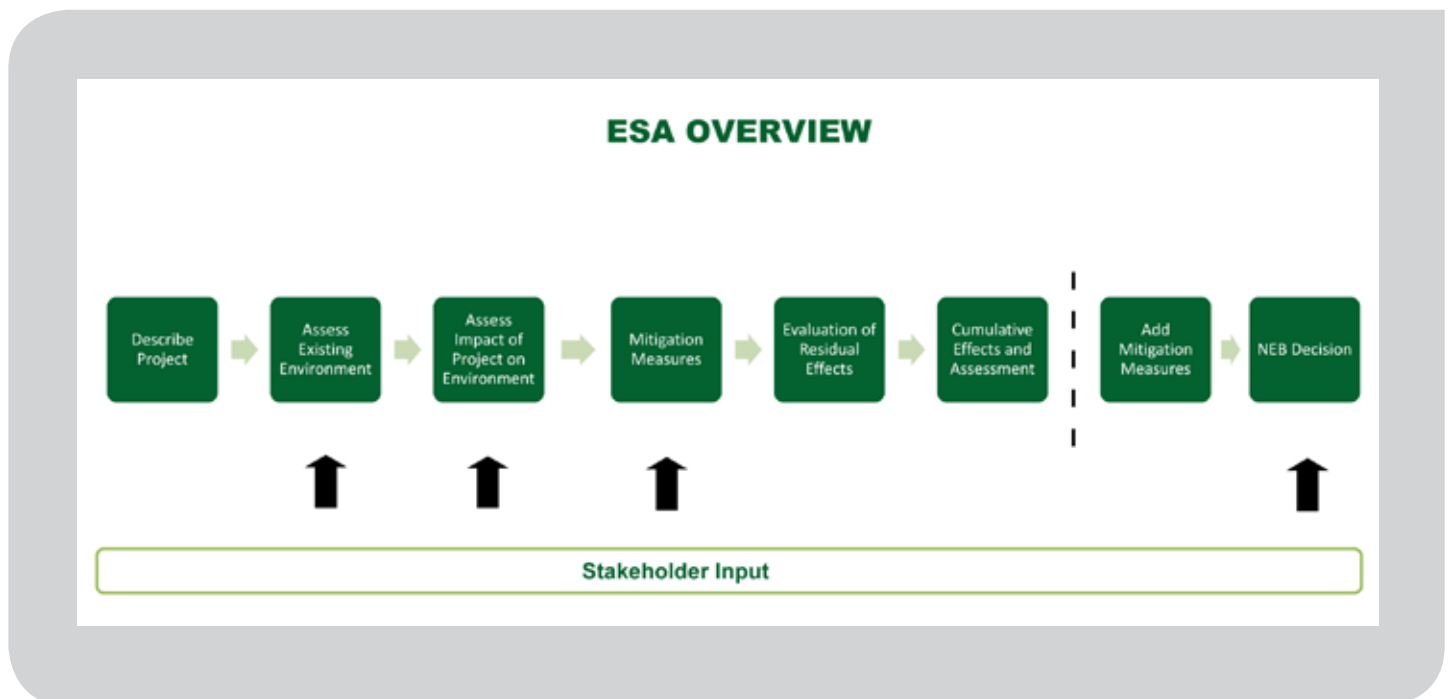


Identifying Route Options

- Routing studies and consultation with Aboriginal peoples, landowners and communities
- In locations where routing options are required, studies will be conducted within a 150m assessment corridor to identify an 18m operational right-of-way
- Routing studies will consider
 - o Human Environment:
 - Land use: residences, commercial, recreation, parks
 - o Natural Environment:
 - Sensitive areas
 - Water crossings
 - Wetlands and wildlife
 - o Engineering:
 - Technical constraints/possible construction techniques
 - Geotechnical conditions
 - Pipeline length
 - Number and difficulty of crossings (highways, roads and other line crossings)
- Final, detailed routing will be determined during the design and construction planning stage, after late 2013

ENVIRONMENTAL COMMITMENT AND ASSESSMENT

- Trans Mountain is committed to environmental stewardship
- Trans Mountain will undertake an extensive Environmental and Socio-Economic Assessment (ESA) of the pipeline, related facilities and increases in vessel traffic resulting from the proposed project
- Detailed Environmental Protection Plans (EPPs) will be developed for the project
- The ESA will examine both natural and human elements associated with the land and marine environments
- Numerous topic-specific field studies will take place along the proposed pipeline route and in/around facilities
- The ESA, EPPs and topic-specific field reports will be part of the Facilities Application to be submitted to the National Energy Board in late 2013





NATURAL ENVIRONMENT

- Field studies will examine the effects and develop mitigation measures related to:
 - o Wildlife, including birds
 - o Wetlands
 - o Air and noise emissions
 - o Soils
 - o Surface water quality and quantity
 - o Groundwater quality and quantity
 - o Fish and fish habitat
 - o Vegetation
 - o Ecological risks

HUMAN ENVIRONMENT

- Field studies will examine the effects and develop mitigation measures related to:
 - o Traditional Land and Resource Use
 - o Archaeology and Heritage Resources
 - o Human Occupancy and Resource Use
 - o Employment and Economy
 - o Infrastructure and Services
 - o Human Health
 - o Viewsheds and Aesthetics
 - o Social and Cultural Well-Being



MARINE EMERGENCY RESPONSE

- Western Canada Marine Response Corporation (WCMRC) is Canada's West Coast-certified response organization responsible for emergency response preparedness
- With a team of well-trained professionals WCMRC is on call 24/7 to manage oil spill response on the BC coast
- Under the 1995 Canada Shipping Act, both oil-handling facilities (shipping or receiving) and vessels 150 gross tonnes and greater carrying oil for delivery, and/or ships 400 gross tonnes and greater calling on a Canadian port must, by law, have an arrangement with a certified response organization
- The Regional Environmental Emergencies Team (REET) provides environmental expertise drawn from experts within response agencies and all levels of government including First Nations
- We work closely with Transport Canada, the Canadian Coast Guard, the provincial government and Environment Canada in preparedness and prevention strategies





MARINE SAFETY

- Tankers must adhere to highly-regulated safety protocols when entering BC waters
 - o Ships require Canadian Coast Guard approval to enter Canadian waters
 - o All tankers in local waters are double hulled and have a number of compartments
 - o Two qualified Canadian pilots are on board all tankers leaving Westridge Marine Terminal
 - o Tankers are tethered to escort tugs capable of controlling the ship if necessary
- Trans Mountain has developed additional safety standards for vessels coming in to Westridge Marine Terminal including:
 - o Ship registry assessment in the months leading up to proposed loading
 - o Ship inspections prior to loading



WESTRIDGE MARINE TERMINAL – LOADING THE TANKERS

- Tanker operations are regulated by Transport Canada, Canadian Coast Guard, Pacific Pilotage Authority and Port Metro Vancouver
- Trans Mountain also pre-screens and inspects vessels before they are allowed to load at the Westridge Marine Terminal
- The largest vessels calling at the Trans Mountain Westridge Marine Terminal are Aframax tankers – due to harbour restrictions, they are loaded only to 90 per cent of their 650,000-barrel capacity
- Aframax tankers are considered mid-size range of tankers that operate globally
- We have loaded marine vessels since 1956 without a single spill from vessel operations
- Loading an average tanker takes 24 hours, after safety and operating procedures have been established





NATIONAL ENERGY BOARD

- The Trans Mountain Pipeline is regulated by the National Energy Board (NEB), a fully independent agency of the Government of Canada established in 1959 to regulate international and interprovincial aspects of the oil, gas and electric utility industries
- The NEB's mandate is to promote safety, security, environmental protection and enhance economic efficiency for the regulation of pipelines, energy development and trade in the Canadian public interest
- As an NEB-regulated entity, Trans Mountain requires approval from the NEB prior to being able to construct the proposed Trans Mountain Expansion Project

Other Regulatory Agencies

- Trans Mountain will also need to seek approval from a number of other regulatory agencies



Facilities Application (to be filed late 2013)

- Trans Mountain will file a Facilities Application to the National Energy Board (NEB) in late 2013 to begin regulatory review of the proposed expansion project
- The Facilities Application will ask the NEB for authorization to build and operate the necessary facilities for the proposed Trans Mountain Expansion Project
- The Facilities Application will include the Environmental and Socio-Economic Assessment (ESA), as well as documentation of the Aboriginal engagement, landowner and public consultation, and engineering components of the proposed expansion project
- The NEB will consider whether the proposed project will meet current and future public needs
- The NEB review considers the ESA, public input, impact of the project and proposed measures to be taken to minimize any impacts
- At the end of its review, the NEB will provide a recommendation to the Governor in Council as to whether the proposed project should proceed

Toll Application (filed June 2012)

- The NEB has jurisdiction over how tolls or fees are charged on pipelines
- On June 29, 2012 Trans Mountain filed a Toll Application for NEB approval of the toll or fee structure for the proposed project
- The Toll Application addresses commercial matters related to the tolls that would be charged to the shippers
- The Toll Application does not impact whether the NEB would approve the proposed Trans Mountain Expansion Project





PIPELINE SAFETY

Our Commitment

- We will take every possible action to prevent a spill and have developed a number of programs to protect and inspect Trans Mountain Pipeline
- No spill is acceptable, but we have plans to respond, clean up, remediate and learn from every incident should one occur
- In the event of a spill, we will examine all aspects of our operations and make modifications wherever possible to prevent a recurrence

Pipeline Safety

- Pipelines remain the safest and most efficient method for transporting petroleum products
- As long as pipelines are properly maintained, their lifespan is indefinite

Pipeline Protection

- Our pipeline integrity management includes regular inspection, maintenance and repair programs managed by a dedicated Technical Services group

- The pipeline has protective coatings and a cathodic protection system to prevent rust and corrosion
- Technology is used to detect changes in pipeline condition and wall thickness

DAMAGE PREVENTION

- The pipeline is marked and signage along the line is maintained
- We conduct regular aerial and ground patrols of the pipeline to look for any irregularities or unauthorized activities along the pipeline corridor
- Permits are issued for any ground disturbance activities near the pipeline
- Education workshops and information mailouts help keep the public aware of the potential risk of activities near the pipeline corridor

“One Call” Program: Call Before You Dig

A central agency to call to find out what is buried on a site and where not to dig.

PIPELINE MONITORING AND EMERGENCY RESPONSE

Monitoring

- Control Centre Operations staff operate and monitor the pipeline 24/7 year round from a Control Centre in Edmonton
- The Supervisory Control and Data Acquisition (SCADA) system monitors the pressures and operating conditions of the pipeline
- Information is transferred from SCADA to the Leak Detection system in real time
- If pipeline flow or pressure changes outside of prescribed norms, an alarm will alert the operator
- If necessary, Trans Mountain can shut the system down remotely using automated valves to stop the flow of product and isolate sections of the pipeline for investigation

Emergency Response

- Trans Mountain staff, combined with trained responders and contractors, provide for 24/7 response management
- Trans Mountain is responsible for cleanup and remediation of incidents related to its operations along the pipeline corridor

- Trans Mountain carries liability insurance to provide coverage for all aspects of spill management, including compensation and remediation
- The Incident Command System (ICS) outlines clear emergency response roles and responsibilities, including use of local emergency responders and qualified clean-up contractors, so Trans Mountain can act quickly to protect its employees, the public and the environment
- Emergency response equipment is located at strategic locations along the pipeline





OUR SPILL HISTORY

History

We recognize the potential for pipeline spills. Our safety programs aim to minimize the effects of spills. We have a strong focus on management systems and preventative maintenance programs, including protection of stream and river crossings. These systems programs are fully documented and subject to audit by the National Energy Board (NEB).

- We are responsible for reporting spills greater than 1.5 cubic metres (approximately 9.5 barrels) to the NEB, the regulator of our system since 1961
- We have loaded marine vessels since 1956 without a single spill from vessel operations
- Since 1961, Trans Mountain has reported 78 spills on its pipeline system to the NEB, some of which are below the reportable threshold
- More than 70 per cent of all spills have occurred at Trans Mountain pump stations or terminals
- Trans Mountain pump stations and terminals have monitoring and spill containment systems that are rigorously maintained and meet NEB standards

What We Have Learned

- Following each spill we have conducted a thorough incident investigation, with recommendations and a Corrective Action Plan
- Our pipeline spill history shows how we have learned from these recommendations and improved our technology and management programs



PUBLIC INPUT INTO NATIONAL ENERGY BOARD PROCESS

- The National Energy Board (NEB) encourages interested members of the public to participate in proponent-led engagement processes prior to the filing of the Facilities Application
- The NEB is required to hold a public hearing for all pipelines longer than 40 kilometres in length
- The purpose of a public hearing is to gather and review relevant information, including information from the public



Public Participation in a National Energy Board Hearing

- There are three ways that individuals or groups can participate in a hearing:
 - **Filing a letter of comment:** a written statement about the writer's views
 - **Asking to make an oral statement:** presenting views in-person at a public hearing – anyone wishing to make an oral statement must notify the NEB in advance
 - **Applying for intervenor status:** 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
- For more information on the National Energy Board regulatory process and opportunities for public input see: www.neb.gc.ca

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