# Pipe up for the BC coast

British Columbian oceans support a large diversity of marine life. In many ways, the Kinder Morgan Trans Mountain Pipeline expansion and Enbridge Northern Gateway Pipeline threaten the wellbeing of both British Columbian waters and the people they support, including potential oil spills. The properties of the crude oil product that will be transported by these pipeline projects could cause much more damage than a conventional oil spill. British Columbians do not want to risk the long-term negative impacts an oil spill would have on their coast or themselves. Do not allow these projects to

Humans dependent on the ocean for nourishment, livelihood, transport, curiosities, enjoyment and a sense of wellbeing. The British Columbian coast is home to rich and thriving diversity of marine life; however, the health of BC waters and the people the coast supports are

now under threat from two large crude oil pipeline projects proposed to

continue and prevent the transport of bitumen in BC.

pump oil into tankers in BC waters. The Kinder Morgan Trans Mountain Pipeline expansion is currently in review by NEB to rebuild the existing pipeline with three times its current oil transport capacity. While the Enbridge Northern Gateway Pipelines have already been approved by the National Energy Board (NEB) to build a new pipeline and is currently consulting with aboriginal communities as well as fixing the 209 conditions of approval

presented by NEB. There are many issues brought up with the construction of these pipelines for British Columbians, particularly the threat of marine oil spills.

# Oil spills and Marine Life

BC marine ecosystems are threatened by the possibly of large oil spills and frequent small spills and leaks from marine terminals and oil tankers. Petroleum products coat all marine habitat and life they come in contact with. Many people are aware of how oil destroys the insulating properties of feathers of birds and fur of mammals, leaving animals to die from hypothermia. However, many don't know that oil spills also decrease growth, reproduction and survival in fish and

The Enbridge Northern Gateway
Pipeline is estimated to bring over
220 oil tankers a year into BC waters
while the Kinder Morgan Trans
Mountain Pipeline expansion will
bring in approximately 404 oil
tankers a year.

Photo: C. Gehlen

Kate McGivney

invertebrates. The lingering and small traces of oil in the environment also accumulate in animal tissues and the toxic effects become amplified through the food web (this is referred to as bioaccumulation). This is even the

case with small spills and leaks that are often unreported. As a top predator, the iconic killer whale is particularly sensitive to bioaccumulation of toxic chemicals.

### **Diluted Bitumen**

Both pipeline projects will primarily transport diluted bitumen, a crude oil product thinned with chemicals. Most oil spill recovery tactics require oil to be on the surface, and result in approximately 10-15% of a marine oil spill to be recovered. However, unlike other petroleum products, bitumen sinks in calm and stormy seawater. This means that bitumen spills will be much more difficult to recover and less oil will be recovered in the event of a spill. Thus an oil spill from one of these projects has the potential to cause severe damage to BC ecosystems by leaving more oil remaining in the marine environment.

## BC Depends on a Healthy Coast

British Columbians value the intrinsic significance of a healthy coast and many also dependent on the ocean for sustenance and their livelihood. In the event of an oil spill, seafood will no longer be safe for consumption due to the accumulation of oil in animal tissues. Many jobs in BC could be jeopardized by

an oil spill, such as those in the seafood and tourism industries. An oil spill could destroy the BC seafood commercial fishery and export industry by the direct effects from oil as well as through lingering public perception of contaminated seafood that is associated with oil spills. Tourism is one of the top job creating industries in BC because of the large number of tourists the BC west coast attracts. Tourism would dramatically decrease in the event of an oil spill based on decease in environmental splendor, and the negative effects would likely linger because of public perception of BC coastal health.

An oil spill jeopardizes the rich and majestic marine life associated with coastal BC and what it means to be a British Columbian.

# Recommendations to protect BC marine life and the citizens who depend on BC waters

- Retract approval of Enbridge Northern Gateway Pipeline
- Do not approve Kinder Morgan Trans Mountain Pipeline expansion
- Ban transport of bitumen in existing pipelines in BC



In the BC economy, over 320,000 jobs directly depend on a healthy coastline. Close to 50% of these jobs could be threatened in the event of an oil spill



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