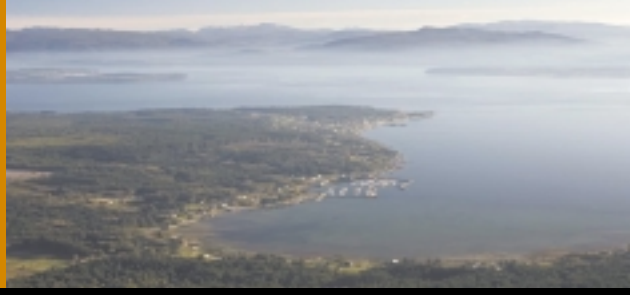
FACT SHEET

Resource Development in the North



IMPACTS OF PIPELINES & TANKERS ON THE BRITISH COLUMBIA COAST

Pipelines, Tankers and the British Columbia Coast

Many of the new energy projects planned for northern British Columbia will require tankers passing through our waters.

If all these projects proceed, there will be an estimated 320 tankers a year travelling inside coastal waters, almost one a day. Just in Kitimat there is a plan for a crude oil port, a liquified natural gas (LNG) facility and a receiving dock for condensate tankers. Oil spills will be inevitable: fish, marine mammals, seabirds and other marine life will be affected.

▲ *Proposed pipeline projects will mean oil tankers travelling on British Columbia's coast, such as this one in Kitimat, June 2006.*

CREDIT: BRUCE HILL

What Are the Potential Impacts?

The threats from increased tankers include air pollution and ballast water discharge. But the most significant environmental concern is the risk of oil spills. Impacts of oil spills are known: the best example is the Exxon Valdez spill of 1989 that spilled over 11 million gallons of crude oil into Alaskan waters. An estimated 2,800 sea otters, 250,000 birds, 1.9 million salmon and 12.9 billion herring were killed. A 2003 study found lingering effects on local marine life in Prince William Sound, Alaska, 14 years after the spill.[1]

The impacts of condensate and LNG are not as well understood. Condensate is a chemical and petroleum mixture used to thin the tar extracted from the Alberta tar sands so it can easily flow through pipelines. Condensate is acutely toxic to marine life. It kills organisms immediately but evaporates more quickly than oil.[2] Although there have been two major condensate spills in Canadian waters, the impacts of condensate on marine life have not been well researched.

LNG is natural gas that has been cooled to minus 160° to be transported more efficiently in a liquid state. The main concerns around LNG are the potential risk to public safety from an accident as it is highly explosive and will immediately turn into gas when exposed to temperatures higher than minus 110°. If enough gas is present, it could displace the oxygen in the air, a suffocation hazard to anyone near the release, or it could inflict burns because it is easily ignitable. While the likelihood of such an event is minimal because the LNG industry has a good safety record, the consequences of a mishap could be significant.[3]

1 *Peterson, C.,.S. Rice, J. Short, D.Esler, J. Bodkin, B. Ballachey, D.Irons. 2003. "Long-Term Ecosystem Response to the Exxon Valdez Oil Spill." Science. Vol: 302 2082-2086.*

2 *Fingas, Merv. Chief, Emergencies Science Technology, Environment Canada, Personal Communication. 2006.*

3 *Coastal First Nations. 2006, An Overview of Proposed Resource Based Developments.*

▲ *TOP PHOTO: Coastal communities will be affected by tanker traffic.*

CREDIT: ROLF HICKER

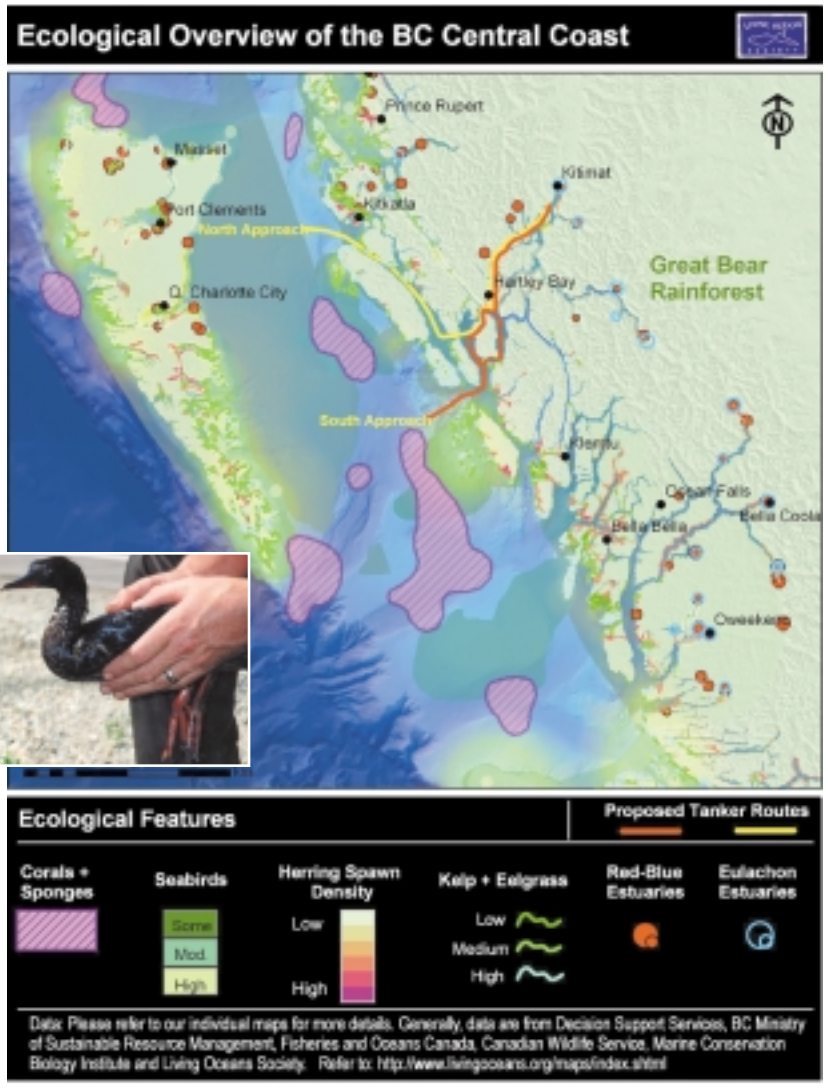
How Likely is a Spill?

In 1977, the Government of Canada evaluated the risk of an oil port in Kitimat. Its report concluded that serious oil spills would be inevitable and that these spills would likely have major adverse impacts on fisheries populations in the northern coastal region.[4]

Internationally, between 1974 and 1999, there were 278 tanker spills greater than, or equal to 1,000 barrels of crude oil. During the same time period, 46 crude oil spills of at least 1,000 barrels from tankers occurred in U.S. waters, including 11 spills associated with Alaska North Slope crude oil transportation.[5]

Terminal spills are also common, and although these spills tend to be much smaller than major tanker accidents, they are a chronic source of pollution that can be extremely harmful to local marine life.[6] As many as 92% of all oil spills involving tankers happen at a terminal when oil is being loaded or discharged.[7]

According to research by Environment Canada, 100 small, 10 moderate and 1 major spill is predicted every year based on current levels of tanker traffic in Canada. A catastrophic spill (over 10,000 tonnes) is predicted once every 15 years.[8] Even with modern technology, recovering 15% of the oil spilled from major tanker accidents is considered successful.[9]



▲ *With almost 320 tankers a year travelling inside coastal waters oil spills will be inevitable: fish, marine mammals, seabirds and other marine life will be affected.*

CREDIT: LIVING OCEANS SOCIETY

INSET PHOTO: Oil soaked bird. CREDIT: WEST MOBERLY FIRST NATIONS

What About the Moratorium?

Crude oil tankers have been banned from Hecate Strait, Queen Charlotte Sound and Dixon Entrance since 1972, according to federal government documents.[10] However, in 2006, the federal government position appears to have changed; it now supports tanker traffic travelling through British Columbia's inside coast to ports in the province. A change of this nature should not be made without consultation of affected First Nations and communities as it has serious implications for British Columbia's coast.

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4 *Canada Transport Canada. 1977. TERMPOL Assessment of the Kitimat B.C. Marine Oil Terminal Proposal. Ottawa, ON: Transport Canada, Canadian Coast Guard; see also Gunton, T., J. Day and T. Van Hinte. 2005. Managing Impacts of Major Projects: An Analysis of the Enbridge Gateway Pipeline Project. Simon Fraser University, School of Resource Management.*

5 *Gunton, 2005.*

6 *Ibid.*

7 *Environment Canada. 2005. Environmental Emergencies: EE Publications – Oil, Water and Chocolate Mousse – Chapter 3.*

8 *Brander-Smith, D., Therrien, D., Tobin, S., 1990. Public review panel on tanker safety and marine spills response capability. Final Report, 263pp.*

9 *Clarke, L. "Oil Spill Fantasies." The Atlantic Monthly. Nov. , 65 - 77; see also International Tanker Owners Pollution Federation Handbook 2003/2004, p. 14.*

10 *Natural Resources Canada. 2003. Terms of Reference. Public Review of the British Columbia Offshore Oil and Gas Moratorium.*