

Oil and Gas Development and Your Right to Participate

Proposed pipeline and infrastructure projects for northern British Columbia have the potential to significantly change the northern landscape.

For example, the throughway made for the Enbridge Gateway Pipeline is the area's first exposure to oil and gas development, which may then result in a secondary wave of exploration and proposed development for

conventional oil and gas reserves. Enbridge's pipeline route crosses known coal fields and sedimentary basins, and there is large potential for oil, gas, coalbed methane, tight gas and shale gas to be developed.

Developers and regulators can reduce their impacts through careful planning and the use of best available technologies and practices. The people in nearby communities can ensure these practices are implemented because they will experience the most direct impacts.

Seismic Exploration Impacts

To gather information on where to drill wells, companies conduct seismic exploration. Crews clear a line through the brush 5–8 metres wide, drill holes up to 20 metres deep and detonate explosives in the holes. Removal of vegetation on cutlines can lead to the washing of soil sediment into waterways and significant effects on the quality of aquatic habitat. The cutlines and access roads open previously inaccessible areas, fragment the landscape and affect the way wildlife travels. For instance, studies indicate that woodland caribou avoid being within 250 metres of a cutline.



▲ Drilling waste collected in sump pits can contain toxic substances and is often allowed to be spread on nearby land.

CREDIT: DAVE MUSSELL

▲ TOP PHOTO:

This road to a gas well caused sediment to wash into waterways and threaten fish and other aquatic life.

CREDIT: WAYNE SAWCHUK

Well Site Impacts

When drilling a typical well, developers clear and level an area of land, build access roads and dig a sump pit to hold drilling wastes. Companies are also often allowed to discharge drilling waste directly into the environment through spreading or spraying it over nearby lands. These wastes can contain a mixture of toxic process chemicals, contaminated water and hydrocarbons and can be washed into surface waters by rain. As well, cracks in the well casing can allow the oil or gas to enter subsurface rock formations and contaminate groundwater.

After drilling, developers allow the oil or gas to flow to the surface for a few days and flare it off as they assess the well's productivity. Combustion at the flare stack is often incomplete and can release hundreds of compounds harmful to both humans and wildlife. These include known carcinogens and can include the extremely toxic gas hydrogen sulphide.

Minimizing Impacts

To minimize damage to natural systems, developers can use a number of alternate practices and technologies:

To decrease the impact of seismic exploration on wildlife and prevent surface erosion, crews can use hand tools or small mulchers to create meandering, rather than straight, cutlines less than 2 metres wide, and leave chips and brush on-site to prevent surface runoff.

To decrease impact on waterways and fish habitat, stream crossings should be at 90 degrees to the stream, should not decrease the width of the channel and should leave the banks intact.

To eliminate the possibility of ground and surface water contamination, all drilling wastes should be diverted to above-ground tanks and disposed of at approved industrial-class landfills.

To eliminate the effects that flaring can have on air quality, flare times can be reduced to the minimum number of hours necessary to assess the reservoir potential – often hours rather than days.

Your Right to Participate

Governments and regulators recognize that people and communities who live in areas of proposed oil and gas development may be concerned about the associated environmental impacts. In British Columbia, there are opportunities for the public to comment during certain phases of development. Where Aboriginal Rights and Title may exist, First Nations have constitutionally guaranteed rights to be consulted and have their interests accommodated.



▲ *The people in nearby communities will experience the most direct impacts of oil and gas development.* CREDIT: KAREN CAMPBELL

When these activities are proposed for your area, determine the following: when will the development occur; who “owns” the land and the mineral rights; what types of development activities are being proposed; how decisions about the application will be made; and what exactly your concerns are. Once you have these answers, contact the Oil and Gas Commission and the company to explain your concerns or objections.

When people share questions, concerns and expectations directly with companies and through regulators, it helps to uphold and improve industry performance. When First Nations and the public are able to participate effectively in decisions about oil and gas exploration, it pushes companies to higher levels of performance and helps ensure that developers follow the best practices possible in their activities.

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