FRACKING
Our Future?

Hydraulic fracturing – or “fracking” as it is more commonly known – is a technique that involves the injection of millions of litres of water and thousands of litres of unidentified chemicals and sand underground at very high pressure to break up underlying shale rock formations and release natural gas below the surface.

So what exactly happens when you blast a toxic cocktail of water and chemicals into the ground? What effect do these highly pressurized fractures have on the land? Do the chemicals used in each frack stay in the wells, or do they seep and migrate, finding their way through cracks and crevices and into other nearby water sources?

There are many questions and concerns being raised about fracking, not only here in Canada, but around the world. While industry sees it as another way to pull natural gas from the earth, not a lot is known about the long-term effects of fracking.

But more and more people are asking questions, and demanding answers from governments that only minimally regulate the industry. With more stories emerging from people who can no longer drink or use the water in their homes, who are experiencing health concerns such as skin rashes and burns, nose bleeds and digestive issues, there is a growing movement to stop fracking altogether.

In this special section you will learn more about where fracking is happening in Canada and around the world, how the fracking industry is using trade agreements to push their “right” to frack, how communities are banding together to protect themselves, and how people have been successful in saying “no fracking way.”
Fracking Across Canada

**Yukon** Community opposition to fracking was spurred by an application submitted by the Chinese company Northern Cross in 2010. There is currently no fracking underway in the Yukon, but Northern Cross has been conducting 3D seismic testing. The Council of Yukon First Nations passed a resolution in July 2013 declaring traditional territories “frack-free.”

**British Columbia** British Columbia is home to what’s known as the world’s “largest frack,” with shale gas reserves in the Horn River, Montney, Liard and Cordova basins located in the province’s northeastern corner. There have been more than 1,062 wells fracked in B.C. In 2010, over the course of 111 days, a gigantic frack took place at Two Island Lake in the Horn River Basin, with an average of 17 fracks per well, which used 5.6 million barrels of water, 111 million pounds of sand and massive quantities of unknown chemicals.

**Alberta** The Alberta Energy regulator says that 171,000 wells have been fracked in Alberta since the 1950s. There are 15 prospective shale gas formations in the province and five of these formations (Duvernay, Muskwa, Basal Banff/Exshaw, North Nordegg, and the Wilrich) may contain up 1,291 trillion cubic feet (TcF) of shale gas. The province could contain an additional 500 TcF of coalbed methane (CBM). While CBM typically uses less fracking fluid than shale gas, the wells are not as deep, so fracking happens closer to the surface, heightening concerns about potential drinking water contamination.

**Saskatchewan** Fracking in Saskatchewan is almost exclusively for the extraction of the province’s oil reserves. Most fracking is concentrated in the Bakken oil play, which straddles the Canada-U.S. border. The area is estimated to hold 200-300 billion barrels of oil, with potentially 1.3 billion barrels in Saskatchewan alone.

**The Northwest Territories** The Canol shale formation of the Sahtu area in the central Mackenzie Valley is believed to be one of the largest potential sources of oil shale on the continent, with estimates of between three and five billion barrels of recoverable oil. Oil and gas corporations Imperial Oil, Shell, ConocoPhillips, MGM Energy and Husky have invested $628 million since 2011 to lease 15 parcels in the central Mackenzie region for exploration. In July 2013, it was announced that an additional 10 parcels of land would be made available for lease. There is also potential for fracking in the southwest NWT, in the Fort Liard region of the territory.

**Manitoba** Fracking for oil is confined to a small corner in southwestern Manitoba. Since 2006, a total of 1,978 horizontal wells have been drilled. However, there is little public information on the chemicals and the amount of water used in the fracking process. The Manitoba government is working on new regulations for the fracking industry and creating a “FracFocus” website where fracking companies can “volunteer” information about the chemicals and water they use.
Ontario

While there is presently no fracking underway in Ontario, the Ontario Geological Survey (OGS) has highlighted the shale gas potential in the Ordovician Shale formations located in southern Ontario. The OGS drilled in 11 locations, including St. Joseph, Little Current, Wiarton, Bruce, Chatham, Port Stanley, Halton, Mount Forest, Imperial, Lincoln, Pickering and Russell.

Ontario borders four of the five Great Lakes. Developing these shale formations could have serious implications for the Lakes, Georgian Bay and local watersheds.

Quebec

In May, 2013, Quebec’s Environment Minister tabled Bill 37 which, if passed, would impose a moratorium on fracking in the Lowlands of the St. Lawrence River for up to five years. The proposed legislation would revoke all drilling licences and prohibit new ones. Bill 37 follows years of opposition to fracking in Quebec. In 2008 there was a burst of exploration activity in the St. Lawrence River Lowlands for the Utica shale formation, with 31 wells fracked. This sparked significant local opposition and prompted dozens of municipalities to pass resolutions banning fracking.

New Brunswick

The provincial government is moving forward with fracking despite growing public opposition. Most gas resources in the province are trapped in shale formations. There are currently 49 fracked wells in the province.

People from across the Atlantic region have gathered in support of the Mi’kmaq in Elsipogtog as the community continues to block shale gas exploration by SWN Resources Canada.

Prince Edward Island

The Department of Finance, Energy and Municipal Affairs governs fracking in the province. As of August 2013, there are no fracking operations underway, however, up to 40 per cent of the province could be exposed to fracking in the future. Some experts believe there is a potential of 7.6 TcF of coalbed methane in the ground on P.E.I. Local residents have joined together to form a diverse coalition under the banner “Don’t Frack PEI.”

Newfoundland and Labrador

Shoal Point Energy submitted a proposal to perform onshore-to-offshore fracking for oil exploration in several sites along the west coast of Newfoundland. Black Spruce Energy has since negotiated a farm-in agreement for exploration with Shoal Point. Public concern has focused on one location in particular – Rocky Harbour, which is fully encircled by Gros Morne National Park, a UNESCO World Heritage Site.

Nova Scotia

In early 2011, the Nova Scotia government announced it would be reviewing fracking. The review was extended in April 2012 for an additional two years.

In 2008 fracking occurred in the Kennebecook and Noel region in Hants County. Triangle Petroleum Resources had several permits that allowed fracking and water withdrawals from local rivers. The lack of information related to this project brought people together in the coalition known as NOPRAC.

Lake Ainslie, Nova Scotia’s second largest freshwater lake, was also under threat from fracking operations. In September 2012, the Mi’kmaq Warriors Society and other Indigenous communities set up a partial blockade on the Canso Causeway to highlight the dangers of oil and gas drilling.
Many Council of Canadians chapters took part in the first Global Frackdown in 2012. This year’s event, happening in October, will see communities around the world speaking out against fracking.

Fracking is spreading like wildfire, not only in Canada, but also all over the world. Yet growing alongside the rapidly expanding industry is a grassroots movement to ban fracking and protect water sources, public health and the environment.

The United States has one of the largest shale gas reserves and is leading the fracking boom. Companies like Encana are breaking records with the amount of water used for fracking operations from the Great Lakes Basin.

In August, Americans Against Fracking – a coalition of environmental and consumer organizations – delivered 650,000 public comments calling for a ban against fracking on public lands. In May 2012 Vermont became the first state to ban fracking. There have been local measures to stop fracking passed in 20 states, including California, Michigan, New Jersey, Ohio, Pennsylvania and Virginia. The Haudenosaunee Environmental Task Force and the Turtle Mountain Band of Chippewa have also instituted bans.

New York State has been a hotbed of activity in the fight to ban fracking. In addition to having a state-wide moratorium, New York municipalities have passed more than 200 local resolutions against fracking, by far the most passed in any one state in the U.S.

In Mexico, fracking is underway with a few exploration wells along the U.S. border. While the Mexican government currently controls energy provision in the country, it has proposed energy reforms that encourage the participation of private companies. Fracking proponents often argue that without private sector participation, Mexico will not be able to take advantage of its shale gas reserves.

The Alianza Mexicana contra el Fracking was launched in August, creating a coalition of 16 environmental, consumer and human rights organizations, including the Council of Canadians’ Blue Planet Project. The coalition is calling for a fracking ban.

In Europe, France and Bulgaria have banned fracking, while Ireland, the Czech Republic, Denmark and North Rhine-Westphalia state in Germany have implemented moratoriums. German brewers made international headlines this spring when they warned that fracking could harm the beer industry.

Romania’s government is reconsidering the future of fracking in the country. Romanians have held frequent and fervent protests against the practice, and Bulgarians crossed the border in June to join their neighbours in calling for a ban. Strong community opposition, coupled with the myth of a natural gas glut driving down prices in the U.S., has cast doubt on shale gas development in Europe. Although Poland is estimated to have one of the largest unconventional gas reserves in Europe, gas companies have recently gotten cold feet, casting doubt on the future of fracking there.

Despite community protests, South Africa recently gave the green light to fracking companies by lifting a moratorium on fracking that had been in place since April 2011.

China has a high number of shale gas reserves and has moved full steam ahead with fracking. Concerns were raised recently when gas companies began fracking in Sichuan, an earthquake-prone province in southwestern China. The threats fracking poses to water and public health are compounded in China given the country’s existing water crisis. Nearly half of China’s rivers are so polluted they are unfit for drinking.

Communities around the world are joining a global call to ban fracking as part of the annual “Global Frackdown.” During the first Global Frackdown, which was held last September, more than 200 community actions in more than 20 countries challenged fracking and its impact on water, the environment and public health. Communities around the world organized rallies, street theatre actions, and meetings with politicians – all to be a part of the call for a global ban on fracking.

This year’s Global Frackdown took place on October 19. We hope you were a part of it!

Emma Lui is a Water Campaigner for the Council of Canadians.
There Is **No “Right” to Frack**

When the people of Quebec spoke out against fracking, the provincial government listened. Quebec put a moratorium on the controversial and dangerous method for extracting hard-to-reach natural gas until the environmental impacts could be studied.

As we have highlighted in this special section, fracking uses enormous amounts of water and sand, mixed with toxic chemicals, which are forced into the ground at high pressure to fracture shale rock or coal beds to release natural gas or oil. The process is linked to earthquakes and water pollution. More importantly, fracking creates an illusion of energy security while actually worsening the climate crisis, which is why communities around the world are trying to stop it.

You would think the Quebec government would be able to implement measures to protect its people and their environment – but a U.S. fracking company called Lone Pine Resources thinks otherwise.

Lone Pine wanted to frack for gas under the St. Lawrence River and has threatened to sue Canada under the North American Free Trade Agreement (NAFTA). The company is demanding $250 million in compensation for Quebec’s moratorium, which it says violates the company’s “right” to frack.

Earlier this year, the Council of Canadians joined with other organizations to launch a petition demanding that energy company Lone Pine Resources drop its $250 million NAFTA lawsuit.

The petition’s sponsors – the Council of Canadians, the Réseau québécois sur l’Intégration continentale (RQIC), Sierra Club U.S., FLOW (For Love of Water), Eau Secours! and Amies de la Terre – sent letters to Lone Pine with signatures from more than 3,000 people calling on Lone Pine to drop their NAFTA suit.

“People across Canada and the United States are outraged that a company would claim it has a ‘right’ to frack under trade deals like NAFTA, and that we might have to pay Lone Pine Resources not to drill in the St. Lawrence,” said Emma Lui, a Water Campaigner with the Council of Canadians. “There should be no ‘right’ to frack, or to dig a mine, or lay a pipeline. Investment treaties cannot be allowed to override community decisions.”

“Governments must have the flexibility to say ‘no’ to fracking and other environmentally destructive practices without trade rules getting in the way,” said Ilana Solomon, Trade Representative with the Sierra Club. “The fact that a U.S. oil and gas corporation is bringing a trade case against the government of Canada over a law intended to protect the health and well-being of its citizens shows just how backward our trade rules have become.”

### Quebec’s moratorium

In 2011, the Quebec government placed a moratorium on all new drilling permits until a strategic environmental evaluation was completed. When the current Quebec government was elected last year, it extended the moratorium to all exploration and development of shale gas in the province. Last fall, Lone Pine indicated that it planned to challenge Quebec’s fracking moratorium. Instead of going to court, the Calgary-based company is using its incorporation in Delaware to access the investment protection chapter of NAFTA, which is available only to U.S. and Mexican companies, to challenge the Quebec moratorium in front of a paid and largely unaccountable investment tribunal. The company says the Quebec moratorium is “arbitrary” and “capricious,” and that it deprives Lone Pine of its right to profit from fracking for natural gas in Quebec’s Saint Lawrence Valley.

“Lone Pine must drop its scandalous lawsuit against this legitimate policy of the Quebec government, which has just been listening to its people,” says Pierre-Yves Serinet, coordinator of the Quebec Network on Continental Integration (RQIC).

In an unfortunate but possibly fortuitous move, Lone Pine executives have decided to ignore the public outcry and move ahead with their $250-million NAFTA lawsuit. The decision is bound to draw global attention to the injustices of investor-state arbitration and its abuse by oil and gas companies to hold back serious efforts to address climate change.

All communities, including Quebec, have a right to decide whether or not they want fracking. Companies like Lone Pine must not be allowed to abuse investor rights in treaties like NAFTA. We shouldn’t have to pay to protect ourselves and our environment. Communities, not private firms, should have the final say on fracking and other projects that threaten water sources, the environment and public health – and there should be no penalty for saying “no.”

Stuart Trew is the Trade Campaigner for the Council of Canadians.
Fracked Gas Is Coming down the Pipe

by Maryam Adrangi

Industry and government representatives were working closely together in the lead-up to the B.C. election this past spring, resulting in a surge in proposals to expand the fossil fuel industry in the province.

Oil and gas investors said B.C.’s election “was the single most important election to the energy landscape in all of North America in several years.” Because of this, communities in northeastern B.C. are now inundated by energy-intensive projects, particularly fracking. And there is no slow-down in sight.

British Columbia is already home to one of the largest fracking regions in North America, which includes the Horn River, Montney, and Liard basins, and there are more than 1,000 fracking wells in the province. Take these numbers, add in the fact that the province wants to frack more, that there are 10 proposals for Liquified Natural Gas (LNG) plants on the coast, and that the Harper government is looking at this path as an “energy corridor.” The fact that there are other pipeline proposals to expand the fossil fuel industry in the province.

Opposition to pipelines has emerged across North America. First Nations have united against the Northern Gateway pipeline by signing on to the “Save the Fraser Declaration,” which states that communities will not let tar sands pipelines or tankers through their traditional territories. People in southern Ontario and in Quebec have led fights against pumping stations that are part of the Line 9 expansion and reversal project. And landowners and students in Texas have been chaining themselves to machinery, setting up “tree-sits,” and occupying land in order to stop construction of the Keystone XL pipeline.

A pipeline boom in B.C.

Similar actions may happen in the fights against fracking expansion, and in particular, against the several proposed pipelines that would transport fracked gas from northeastern B.C. to coastal LNG plants for export.

The Pacific Trail pipeline would bring fracked gas through northern B.C. The pipeline, which has already been approved by the province, follows much of the same route as the Northern Gateway pipeline, which suggests that industry is looking at this path as an “energy corridor.” The fact that there are other major fracking export pipeline proposals from Pembina, Spectra, and Coastal Gas Link that follow – for the most part – the same route, confirms this idea.

But communities along the route are saying “no” to pipelines. The Unist’ot’en Clan of the Wet’suwet’en First Nation have set up log cabins, permaculture gardens and pit houses along the route of the proposed Pacific Trail pipeline. Clan members have also evicted pipeline surveyors from the territory. Every year the Wet’suwet’en host an action camp, inviting people to come and see the land where they hunt and the river from which they drink and fish. People can see that the so-called “energy corridor” will have serious impacts on the land and water the Wet’suwet’en are protecting.

People’s collaborative efforts to slow work down can be an effective strategy to stop industrial expansion. With delays to surveying and land access being denied, the Pacific Trail Partnership had to develop a new pipeline route and request an extension to the terms of the project’s environmental assessment because the company was unable to start construction before the original deadline.

Industry may be adamant about pushing through fracking pipelines, but communities are also adamant about protecting their land and water for future generations. During our “No Pipelines, No Tankers” speaking tour last year, Council of Canadians National Chairperson Maude Barlow said: “Pipelines are the arteries and the blood lines of the tar sands.”

Similarly, pipelines are the bloodlines and arteries of the gas industry. While we build community understanding about fracking we are going to see a powerful groundswell of opposition intent on stopping the pumping flow of fracked gas.

Maryam Adrangi is an Energy and Climate Justice Campaigner with the Council of Canadians.
Indigenous Perspectives on Fracking and Water

Pikto’l Sa’kej Muise (Victor Muise) is a Mi’kmaq from Bay St. George on the west coast of Newfoundland. He is involved in traditional teaching and is a certified prospector, and he has been involved in his community’s fight against fracking.

Our people have been here for a long time. We come from an oral tradition and learned our culture and knowledge by carefully listening to what our Elders and other people say. To survive within the spirit of our traditions, respect for the environment and Mother Earth, we listen and determine the truth of what has been said by reflecting.

I understand that the Mi’kmaq People and other Aboriginal peoples are the custodians of the land and the water. What we do to Mother Earth, we do to ourselves. We are not outside the environment; we are the environment. We learn through our teachings that we have to make decisions for the next seven generations. This principle is fundamental to our ways and how we see the world.

Today we treat the land poorly by fracking for oil and gas. What we do to the land, we do to ourselves. When I talk about fracking with the youth, they express their deep concerns. A lot has been said about chemicals, well contamination and the lack of regulations. Some of the youth are well educated and have researched hydraulic fracturing and believe that this is not good for the land, our people and the animals. We have learned in this process that other Aboriginal organizations around the Gulf of St. Lawrence have voted for a moratorium on fracking to protect their rights to safe water and clean land.

The Mi’kmaq people I talk to have problems understanding how governments (in Ottawa and in St. John’s) can make such important decisions without consultation with our people. Governments know that the Supreme Court of Canada has ruled that there is a “duty to consult” with Aboriginal peoples before important projects go ahead. They do not have the moral authority, the mandate or the support from the people to frack. Governments should also know that allowing consultants and oil companies to make short, simple, limited, unclear presentations to the Aboriginal peoples in the area cannot be considered sufficient consultation in any court of law.

Amy Sock is a self-described “woman warrior” from the Elsipogtog First Nation in New Brunswick. She describes the tension she feels since the Harper government passed omnibus budget legislation that reduced or removed many of Canada’s environmental protections.

When I was a child everything around me amazed me – the ladybugs, the long-legged spiders, the river and the sand. I grew up having a great-grandfather who made baskets and was an avid fisherman, just like my 85-year-old Mi’kmaq grandfather. As you may imagine, I ate mainly fish: mackerel, salmon, lobsters, clams, eels, bass, trout and smelts are my favourite. As a forty-something Native woman (Lnuisk), my heart is in sync with Mother Earth. I cannot explain how I feel properly in our English language. It’s like the blood running through my whole body revives and the beauty of it all engulfs me each time I fish, camp, pick berries or see an eagle.

Never would I have thought I’d be referred to as an “activist,” “terrorist” or “a radical,” but since Canada passed the omnibus budget bills, those are names I now have.

The contents of these bills affect the land and water. The regulations previously in place for centuries were replaced by ones that make water, lands and resources like oil and gas easier industry to access.

The changes in the bills made it my personal duty to save our water. I was happy to find I am not alone in this battle. Our numbers are growing – we have been joined by many kind-hearted people, the English, the French, and the Acadians, and people from many parts of the world are watching and praying for us. They come to us in great numbers with kindness and gratitude and an open mind to try and understand our ways.

For as long as I shall breathe, water and its safety will be my problem. For we Lnuisk do not own the land, we are here to protect Mother Earth. It’s our duty. And our Aboriginal and treaty rights – which are legally binding laws – say so as well.
Support was strong as Atlantic Council of Canadians chapter activists took part in the 2012 Global Frackdown to say “no” to fracking near Lake Ainslie.

Winning Community Fights Against Fracking

Across Canada, people are banding together to say “no” to fracking. In recent months, Atlantic Canada has been a hotspot for this kind of grassroots community action.

Inverness County Council in Nova Scotia made history by passing a by-law that banned fracking within the county. The by-law recognized the precautionary principle to protect the rights of individuals, and looked at other regulations that would be contravened by allowing hydraulic fracturing. The Inverness County Chapter of the Council of Canadians played a key role in moving the by-law forward. Chapter members said a transparent and inclusive public consultation process allowed the by-law to eventually earn overwhelming support in the county.

This past summer, Kent County, New Brunswick, became a beacon for fracking opposition when Texas-based Southwestern Energy attempted to perform seismic testing throughout the region. With already-established community groups adding their voices to the newly mobilized members of the Elsipogtog First Nation, the community opposition has been strong. Media coverage often focused on the people who were willing to stand in front of the thumper trucks used for seismic testing, and there were also days of solidarity actions when hundreds of people would visit the Sacred Fire and encampment. Mi’kmaq, Acadians and Anglophones have all worked together. The company left the province in August, but recently returned to complete seismic testing. The Elsipotog Band Council has issued an eviction notice to the company.

Protecting water has been key to these fights. For example, when Atlantic Industrial Services (AIS) applied to Colchester County Council in Nova Scotia for permission to release “treated” fracking waste into the local sewage system (which would result in the fluid eventually entering the Bay of Fundy), thousands of people wrote letters of objection and voiced their concerns at public meetings. The overwhelming response was difficult to ignore and the County rejected AIS’s application.

Atlantic Canadians are not anti-development, and we are keen to become energy self-sufficient. But we are also able to gauge when the risks of energy extraction outweigh the potential benefits, and we have been coming together to protect our water and our communities at every stage of the fracking process.

Angela Giles is the Atlantic Regional Organizer for the Council of Canadians.

5 Things You Can Do to Stop Fracking

1. **Form a group.** There is power in numbers. Join with other groups – youth, environmental, Indigenous and other groups – in your community to strengthen your campaign.

2. **Sign the “Don’t frack with our water” petition** at www.canadians.org. (Download it and get others to sign it too!)

3. **Pass a resolution.** Want to have fracking banned in your community? Visit your municipal council and ask council members to pass a resolution against it.

4. **Talk to politicians.** Let your municipal, provincial and federal politicians know what you think.

5. **Make it public.** Write a letter to the editor, speak to the media, or hold an event to make a public statement against fracking.

Visit www.canadians.org/fracking for more action ideas and resources. Let us know what you are doing in your community and we will add it to our “Fracker Tracker.”

by Angela Giles