



Western
Environment
Centre
wecnl.ca

Newsletter

Inside this issue...

- Sustainability tips
- Updates and articles on fracking
- An interview with the CEO of the wind energy company Beothuk Energy
- And much more

Winter/Spring
2014

From the Editor's Desk

One of WEC's goals is to try to help citizens to become environmentally engaged. Such engagement can take a number of forms and this newsletter can provide you with some ideas.

Environmental engagement can involve making changes in one's lifestyle and habits. The material in this newsletter on the community garden, the cleaning recipe, and the Food Skills workshops can help show the way. By making such incremental changes, you set the example for others.

Likewise, environmental engagement can take a person to broader issues such as water and energy. There, lifestyle changes can fuel an interest in encouraging societies and governments to chart a different course. This newsletter documents WEC's Corner Brook's involvement in World Water Day.

Water is linked to energy in many ways, and we see this in the controversial method of hydraulic fracturing (fracking) to extract fossil fuels. Along with twenty concerned groups, from tourism to medicine to environmental protection, WEC recently issued a press release calling upon the provincial government to conduct an independent, science-based review of fracking. This followed on the heels of a major report prepared by the Council of Canadian Academies, which notes the many problems and unknown effects involved in fracking, including heavy water usage. All of these emerging reports are making fracking less attractive an option.

If I were a politician envisioning the energy future of my province, I would take the more promising road of developing wind energy as a viable and major component of our energy infrastructure. In this newsletter, you will find an interview with Mr. Kirby Mercer, the CEO of Beothuk Energy, a company that has proposed a wind farm for the Bay St. George area as well as a platform construction facility in Corner Brook. Every method of energy extraction involves some impact, certainly, but wind energy seems to be far lighter in this regard than fracking. Fracking carries the problems of heavy water usage, the production of fracking chemicals, the disposal of used fracking chemicals, the release of fugitive methane, the processing of the petroleum extracted, the shipment of the petroleum, the burning of the petroleum, and the list goes on. Moreover, governments would never be able to afford the regulatory regime that fracking seems to require.

Governments must imagine an energy strategy for the long term and citizen action and engagement can prod them to take this approach.

Now for some good news! WEC has received major funding for two wonderful projects that will be coming your way: a series of Food Skills workshops and an E-bike Share program. Kudos to all those who made this happen!

Edwin Bezzina

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We're on Facebook!



You can find us by searching
"Western Environment
Centre"

We're also on Twitter



(www.twitter.com/wecnl)

WEC welcomes comments and questions!

Feel free to write to the
editorial board
(outreach@wecnl.ca) or the
Board of Directors
(info@wecnl.ca).
We'd love to hear from
you.



Cover photo: view of the Bay of
Islands from the Lighthouse Trail,
near Lark Harbour (Photo E.
Bezzina)

WEC's Mandate

The Western Environment Centre (WEC) is a charitable, non-profit, non-governmental organization that is based in Corner Brook and services all of Western Newfoundland. Specifically, the organization strives to:

- engage communities in environmental issues in a balanced, objective, and informed manner
- work with community partners, businesses, and government agencies to build capacity and involvement in projects related to environmental action and sustainability
- create a community of environmentally pro-active citizens

WEC activities can be subdivided into the following areas:

- Long-term projects (e.g., the community garden established at the Blow-Me-Down Ski Park)
- Specific environmental events (e.g., Earth Day, Green Drinks, Earth Hour)
- Working committees
- Detailed responses to inquiries about local and regional issues of environmental concern

How to become a WEC member

(and how to encourage friends to become members):

Please fill out the membership form on the back page and then send it by post to our surface address or by scanned copy to our e-mail address (info@wecnl.ca). Becoming a member is a fabulous first step to becoming environmentally involved in your local community!

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This newsletter was printed on paper certified under the Sustainable Forestry Initiative (SFI), courtesy of Model Forest of Newfoundland and Labrador.

Food Skills Workshops Coming Your Way!

This spring and summer, the Western Environment Centre will be hosting a series of eight workshops on sustainable food systems and practical food skills. With two generous grants from both the TD Friends of the Environment program and the Bauta Family Initiative on Canadian Seed Security, we will be offering community events focused on the 4Ps of local food (planting, picking, preparing, and preserving). Together they teach us how to grow food, harvest it, make healthy meals from it, and preserve it for future use. Combining theoretical and practical knowledge, we hope to provide people with a wealth of information about the health and environmental aspects of the food system and each person's role in it.



Based upon the 4Ps, these workshops were created by the Food Security Network of Newfoundland and Labrador, as part of the Root Cellars Rock project. They are a resource for community groups and individuals across the province to foster knowledge, capacity, and engagement with healthy, traditional food skills in their communities.

We are excited to be able to offer workshops on the following skills: container gardening, seed saving, bottling/canning, preparing local vegetables, culinary herbs, root cellars, composting and edible wild plants. For more info on these topics and to check out the workshop resource we'll be using, visit the informative and fun blog called Root Cellars Rock at: <http://rootcellarsrock.ca>

Stay tuned for more details on dates and locations for our upcoming workshops. We're looking forward to seeing you there.

To check out the Bauta Family Initiative on Canadian Seed Security visit: www.seedsecurity.ca

Katie Temple

With special thanks to:



TD Friends of the Environment Foundation



The Food Skills Workshop Kit!

The Food Security Network of Newfoundland and Labrador (FSN) has launched a Food Skills Workshop Kit as part of its Root Cellars Rock project. The Workshop Kit is a new resource for community groups across the province to host hands-on workshops building local food skills and preserving traditional food knowledge. Topics include container gardening, composting, edible wild plants, seed saving, preparing local vegetables, using culinary herbs, canning, and root cellars. Download the workshops for free to start using today in your community: <http://rootcellarsrock.ca/workshops>.



The Blow-Me-Down Community Garden

It's not too late to sign up for a plot at the Blow-Me-Down community garden. A few more plots are available! For more information, visit the pages on the WEC website: <http://wecnl.wordpress.com/projects/garden/>



Photos from the previous autumn (E. Bezzina)

WEC's AGM 2014, Monday, May 26th, 2014



This year's annual general meeting attracted a good number of people to learn about all the exciting things going on at the Western Environment Centre. Board members gave updates and received feedback from others. Particularly noteworthy was the information provided on WEC's two new projects for which substantial funding has been received: the Food Skills Workshops and the E-bike share project.

Photo courtesy Brittany Taylor

The Cleaning Corner: Homemade Liquid Dish Soap

Making your own homemade cleaning products is not only the more environmentally sound choice but it's also less expensive, safer for your family, easy, and fun! Use this dish soap for your everyday dishes and keep some baking soda handy for the really greasy pots and pans. Home tested and approved!

Ingredients:

½ cup hot water

½ cup liquid castile soap (if you use a scented soap, just be sure to adjust your essential oils)

1 tablespoon white vinegar

1 tablespoon Washing Soda

20 drops tea tree oil and/or other essential oil (optional: lavender or eucalyptus will increase the anti-bacterial qualities)

1 tablespoon shredded bar soap (this is optional; it will thicken the soap so it's more like the consistency of store-bought dish soap)

Directions:

Combine all ingredients in a large bowl. Stir/whisk mixture until all ingredients are thoroughly blended and the bar soap is dissolved.

Allow the mixture to cool completely, stirring occasionally.

Store in any dish soap dispensing bottle.

Bonus Recipe

If you have bought foaming hand soap like that found at Bath & Body Works, keep the dispenser and make your own foaming hand soap! Just fill the bottle with about a 3:1 ratio of distilled water and castile soap scent of your choice!

Rebecca Shea

Come join us at Green Drinks in Corner Brook!

The concept of Green Drinks emerged as a way for environmentally-minded people from a multitude of backgrounds to mingle, network, and connect over a few drinks. Since its inception in 1989 by a group of friends in London, UK, Green Drinks has gathered momentum and now boasts over 800 chapters worldwide. These informal gatherings are agenda-free and offer a congenial social atmosphere.

These Green Drinks events draw a diverse crowd eager to share insights, debate, and meet new people. Future Green Drinks will be held on the first Thursday of every month at King Henry's Pub in the Glynmill Inn—so mark your calendar! Upcoming Green Drinks in 2013 will be take place on **July 3rd** and **August 7th** and all are welcome to attend.

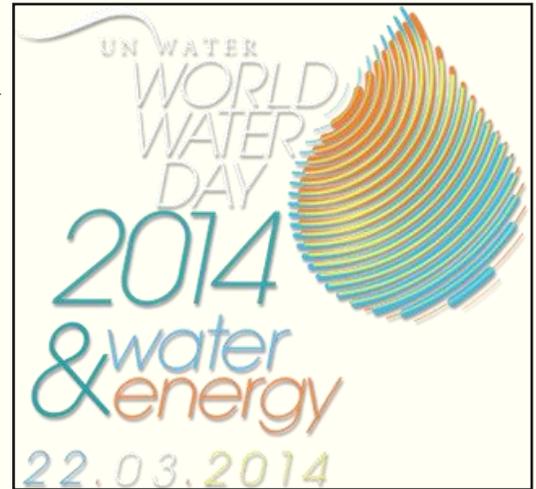
For further information visit: www.greendrinks.org/cornerbrook



logo design by Laura Simms and Daniel Payne; photo by E. Bezzina

WEC Participates in World Water Day Celebrations

On Saturday, March 22nd, 2014, the City of Corner Brook partnered with the Grenfell Campus Environmental Policy Institute (EPI), Ducks Unlimited Canada, and ACAP Humber Arm to host a World Water Day celebration at City Hall. This family-friendly event to celebrate the value of water started with a Children's Reading at the Corner Brook Public Library. Throughout the morning, various community-minded organizations hosted activity booths in the City Hall lobby. WEC offered members of the Blow Me Down Community Garden an opportunity to register for garden plots as well as space in the communal greenhouse for this growing season. Tours were offered of City Hall, a LEED Silver-Certified building. The film, *Oceans*, was shown in the afternoon. Celebrations continued later that evening at Swirsky's on Broadway with a showcase of local water-themed music, art, and poetry organized by the EPI.



The theme of World Water Day 2014 was water and energy, both of which are intrinsically interconnected and vastly important to society. In this province, the Muskrat Falls hydroelectric project in central Labrador is a prominent example of this. Opponents and supporters may never agree whether the benefits to society outweigh the negative environmental effects of constructing the megaproject; the debate will continue long into the future. In addition, recent Newfoundland-wide power shortages highlight our reliance on the energy grid and accentuate the need to find alternatives to aging infrastructure and reduce everyday energy consumption.

March 22nd was declared annual World Water Day by the United Nations General Assembly in 1993 to emphasise the importance of freshwater and to encourage sustainable management of our precious water resources. More information about World Water Day can be found at: <http://www.unwater.org/worldwaterday/>.

Danielle Fequet



Photos courtesy Danielle Fequet

Interview with the CEO of Beothuk Energy

The province of Newfoundland and Labrador was very excited to hear the announcement made earlier about a wind farm and construction facility being proposed by Beothuk Energy Inc. for western Newfoundland. Edwin Bezzina interviewed the company's President and CEO Mr. Kirby Mercer, who provided more details about the scope and feasibility of the project.

EB: Tell us a bit about the project.

This wind farm will be located 50km offshore in the shallow waters of the Bay St. George area and it will contain thirty wind turbines. It is based on proven technology that is being used elsewhere to great effect. These turbines will be serviced from a maintenance port in Stephenville and the gravity-based structures that support them will be built in a plant in Corner Brook.



EB: How would the project benefit the province?

First, we can talk about job creation. Wind energy extraction is a sector that is growing substantially every year, and part of that growth relates to jobs. From this proposed project, there could be as many as 500-700 jobs created in western Newfoundland in a variety of fields of employment (from the highly specialized engineering involved in design and implementation, to the construction of the gravity-based structures, to the towing of the structures to their place on the sea bed, to work at the port, to the maintenance of the units themselves and so on). Beothuk Energy will tap into the skills sets that exist in this population. Moreover, the positions would be high-paying jobs, in order to attract the appropriate skilled labour.

Remember that we would not be building just a wind farm, but also an industry for harnessing wind energy, something that would truly benefit western Newfoundland, particularly in towns and cities such as Stephenville and Corner Brook. The construction facility in Corner Brook could continue to produce the gravity-based structures for other projects, either in Newfoundland or elsewhere. It could be part of the process by which wind energy is incorporated into the energy supply of many jurisdictions. The electricity also could be sold to Nova Scotia, through the company Emera, via the Maritime Link that is currently being developed. Alternatively, the energy could be incorporated into Nalcor's energy supply structure.

Moreover, as this is an offshore wind energy project, it is in many ways quite new. Yet that will create opportunities for research and observation and could generate interest in a center for excellence in the development of wind energy. That could build critical mass and momentum, attracting other industries to this side of the province, because every industry needs a reliable energy source.

Finally, harnessing wind energy can contribute to an energy strategy that fights climate change. Wind energy is not finite. As well, relatively speaking, the whole production process for harnessing wind produces a very small carbon footprint. It is probably the cleanest form of energy there is, and in terms of green energy production the proposed wind farm would be the equivalent of taking 100,000 cars off the road.

EB: What kind of energy would these thirty turbines produce?

Each of the thirty turbines could produce 6 megawatts of electricity each year, for a total of 180 megawatts. That is enough to power 60,000 homes annually. By comparison, the Holyrood plant produces 500 megawatts of power annually. That being the case, the turbine project could contribute to the energy needs of the province, helping it to diversify its energy base.

EB. Is wind power difficult to harness?

Western Newfoundland has the third-best site in the world for harnessing wind energy, in terms of the intensity and consistency of the winds (the winds are not so turbulent here and they move from offshore to onshore in a relatively consistent way). That means that the turbines can produce energy 65% of the time, most of which will be quickly transmitted through cables to either Newfoundland or Nova Scotia. Wind power is actually more efficient than solar power in terms of the electricity that it generates.

EB. Are there any disadvantages in wind energy?

In other wind farms, one hears complaints about the proximity of the wind turbine to homes, and thus noise complaints and even complaints that the turbines are visually unattractive. The wind turbines in this project will be located 30-50km offshore, thus far away from residences. Moreover, the site of the turbines in the Bay St. George is particularly advantageous, because the sea water there is relatively shallow, which makes it easier for situating the structure and laying the cables. The site is also located near main transmission lines, which reduces the overall cost of harnessing the energy and getting it to the appropriate market. The turbines are located out of the way of migratory bird patterns and the turbines will not interfere with commercial shipping or fishing operations.

EB: It has been estimated that the wind farm and the construction facility would require \$400 million in investment. How will you obtain financing and commercial backing for the project?

The project has generated commercial interest and prospective partners abroad. Of course, investment from the provincial government is also welcome.

EB: Is there political interest in the province in the project? Has the province and its energy provider, Nalcor, shown support and interest in the idea?

There does seem to be a change in thinking at the provincial government, in terms of developing and incorporating wind energy into the provincial energy grid and a broader energy strategy. There is a recognition that the energy base for the province must be diversified. Where the Beothuk project improves on previous attempts at developing wind energy is that it will be located near significant population areas and that it will develop an industry and perhaps stimulate the creation of other industries as well. It should be noted as well that the project has received the endorsement of local municipalities, businesses, Boards of Trade as well as the Port of Corner Brook and various post-secondary institutions.



Photo Shaun Wilkinson (Shutterstock 135915173)

Updates and Articles on Fracking

WEC's Position Statement on Fracking

Based on a wide reading of scientific studies, a sub-committee of the WEC Board of Directors prepared the following statement on the proposed fracking operations on the west coast of Newfoundland last summer. The requested hold is now in effect.

The Western Environment Centre (WEC) is a community-based non-profit organization in western Newfoundland composed of citizens who are interested in raising awareness about environmental issues and promoting sustainable development initiatives. As such, we have researched issues surrounding proposed unconventional oil exploration using hydraulic fracturing (fracking).

We recommend that the provincial and federal governments exercise due diligence for the people and the environment of this province. This is particularly important since all the risks and implications of hydraulic fracturing are not fully understood (e.g., waste water disposal, groundwater contamination, air pollution). Therefore, **we call for an immediate hold on unconventional oil exploration and extraction that uses hydraulic fracturing.**

We strongly urge the provincial and federal governments **to establish a transparent and independent panel of balanced representation** to:

1. Conduct a scientific and public review of hydraulic fracturing in Newfoundland and Labrador in order to fully assess the potential health, environmental, economic, and social effects on the region as a whole;
2. Review the associated regulatory, policy, and legislative issues; and
3. Recommend an approach that gives priority to protecting public health and the environment, in addition to fostering sustainable development.

A Report on Fracking from the Council of Canadian Academies

Here is a summary of a major, 292-page report on the impact of shale gas development in Canada. It should be noted that the report has great relevance to the proposed fracking operations in western Newfoundland. Even though these operations would be extracting oil, the effects and the insufficient knowledge base documented on shale gas in this report pertain to oil-fracking because the methods are very similar.

Citation: Council of Canadian Academies, 2014. *Environmental Impacts of Shale Gas in Canada*. Ottawa (ON): The Expert Panel on Harnessing Science and Technology to Understand the Impacts of Shale Gas Extraction, Council of Canadian Academies.



On May 1, 2014, an Expert Panel of the Council of Canadian Academies released its assessment report on the environmental impacts of shale gas development in Canada. Representing a variety of disciplines across science, engineering, public health, and social sciences, the Panel was charged by the federal Minister of Environment to address the question: *"What is the state of knowledge of potential environmental impacts from the exploration, extraction, and development of Canada's shale gas resources, and what is the state of knowledge of associated mitigating options?"*

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Updates and Articles on Fracking

A Report on Fracking from the Council of Canadian Academies (*continued from the previous page*)

The Panel reviewed relevant government and industry documentation, surveyed existing peer-reviewed literature, and attended workshops and conferences to gather information. The scope of their assessment is exhaustive, and should carry weight in any future considerations regarding the development of



shale gas resources in Canada. Water and air quality, natural ecosystems, and public health are all identified as being subject to negative environmental impacts from shale gas. Other areas of concern include public trust in government and industry, and the potential for cheap shale gas to foster a disincentive to develop alternative and renewable energy resources, thus locking in dependence on a high carbon infrastructure. In each category, the Panel noted regional differences in geology, climate, landforms and land use, population density, and public acceptance of the technology; these differences result in numerous variables that make it necessary to evaluate shale gas development and its impacts on an almost well-

by-well basis. When it comes to assessing environmental outcomes, and to developing policy, regulation, and mitigating strategies, one size does not fit all.

The Panel's key finding was that there simply is not enough information available to adequately understand, predict, and therefore mitigate, all of the risks and potential impacts to the environment associated with the development of shale gas. Baseline data is limited, non-existent, or poorly understood. Reports that do exist sometimes conflict, especially with respect to fugitive methane emissions and their long-term cumulative effect on climate change. Because horizontal hydraulic fracturing is a relatively new technology (used 20 years in the US; in Canada, 10), its long-term environmental consequences cannot yet be known and may take years or even decades to become evident (as in the case of groundwater contamination via migration of chemical-laden fracturing fluids). Gaps in knowledge are exacerbated by industry proprietary chemical formulas and processes, non-disclosure agreements, and the speed with which shale gas development is proliferating, outpacing relevant studies and regulatory reforms.

In its conclusions, the Panel stresses that much more study and knowledge are needed before effective policies, procedures, and technologies can be put in place that would render shale gas development free of potentially harmful impact. Similar studies from Australia, Germany and the UK have found the same; and all urge a slow and cautious approach to shale gas. The oft-repeated concerns expressed in this report are for the unchecked pace of development, the lack of authoritative information available, the uncertainties of what can be known, and the need for future study to address knowledge shortfalls. This report makes it clear that our present body of knowledge is insufficient to ensure that there will be no negative environmental impacts resulting from the exploration, extraction, and development of shale gas.

Heather King

Photo: hiking on the Lighthouse Trail, near Lark Harbour (E. Bezzina)

Updates and Articles on Fracking

The Call for an Independent, Science-based Review

In a recent press conference, WEC partnered with the Newfoundland and Labrador Fracking Awareness Network to call upon the provincial government to conduct an independent, science-based review of fracking before making a decision about allowing the practice. A few days after the press conference, Premier Tom Marshall announced that the government will be proceeding with its internal review, but he expressed complete confidence in the government's approach and promised to listen to the voices that are opposed to fracking in western Newfoundland.

Media backgrounder for NLFAN Press Conference

May 15, 2014

Background

In January 2013 and in March 2013, Shoal Point Energy and Black Spruce Exploration applied to the Canada-Newfoundland Offshore Petroleum Board to conduct exploratory onshore to offshore drilling in the Port au Port region and in the region stretching from the Bay of Islands to north of Gros Morne National Park. In their application, the project proponents stated that the target reservoir formations would require hydraulic fracturing. In the months following these applications, public concern over the projects was expressed within the province, across the Gulf of St. Lawrence region, and nationally. In November 2013, the Government announced its intention to conduct an internal review of hydraulic fracturing and that no applications for petroleum exploration using hydraulic fracturing would be accepted in the interim.

A recent report by the Council of Canadian Academies, commissioned by Environment Canada, highlights potential environmental impacts and advises decision-makers to closely consider potential impacts within their own regional contexts when considering the suitability of shale gas (and oil) developments.

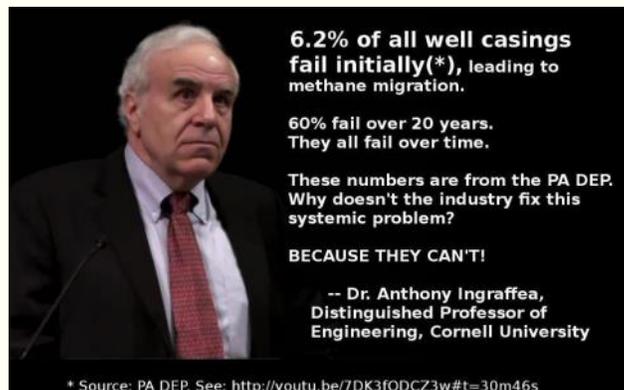
The Newfoundland and Labrador Fracking Awareness network (NLFAN), a network of organizations representing community, health, faith, environmental, fisheries, and tourism sectors has been calling on the Government of Newfoundland and Labrador to commission an independent, external review panel to assess the potential health, environmental, economic, and social effects on this province of hydraulic fracturing and associated technologies.

Factors in the Newfoundland and Labrador Context

A science-based and independent review would not only address what we know about unconventional oil and gas, but also what we don't know.

Local Geology

The western Newfoundland region is characterized by fractured and disturbed rock strata due to its tectonic history. There is no way to know how fracking would affect this rock, how far fractures would propagate, and whether fracking would enlarge existing fractures or increase the connectivity of the fracture systems. There could be a risk of hydrocarbons or fracking fluids migrating up through naturally occurring fractures and into the ocean. Therefore, risks to fisheries, marine ecosystems, food security, and human health also exist.



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Photo courtesy Aiden Mahoney

Updates and Articles on Fracking

The Call for an Independent, Science-based Review

Media backgrounder for NLFAN Press Conference *(continued from the previous page)*

Fisheries and the Gulf of St. Lawrence Sensitive Ecosystems

The Newfoundland part of the Gulf of St. Lawrence has sensitive and biologically important zones including critical areas for cod, redfish, plaice, lobster, krill, and unique winter refuges for herring and capelin. The risks associated with oil and chemical spills and accidents are increased due to the Gulf's complex circulating currents. Local fisheries depend on the health of this larger marine ecosystem.



Tourism Economy of the Region

Tourism contributes \$1billion to Newfoundland and Labrador's economy annually (\$229 million to the economy of the west coast). Protecting the tangible and intangible assets upon which this renewable industry is based, will be critical to achieving the province's 2020 Vision for tourism. The industrialization of coastline and landscape would have negative impacts on the tourism sector and the Newfoundland and Labrador tourism brand.

Lack of Research into the Effectiveness of Mitigation Measures

The Western Newfoundland and Labrador Offshore Area Strategic Environmental Assessment Update (2014) provides a remarkable portrait of the biodiversity of the Gulf of St. Lawrence, and yet acknowledges that research into the overall effectiveness of standard mitigation measures for environmental impacts is lacking. The ice regime, strong winds, and marine currents along the west coast are complicating factors.

Lack of Spill Preparedness in Newfoundland and Labrador

The Report of the Commissioner of the Environment and Sustainable Development also highlighted the lack of oil spill preparedness of the offshore petroleum boards in Atlantic Canada. Specialized emergency response crews are not located on the west coast of Newfoundland. Most recently, the SEA Update for the Western Newfoundland and Labrador Offshore Area noted that standard mitigation measures have uncertain effectiveness. Two in particular stand out as problematic: spill response capability and waste disposal.

Regulation and Governance

There is a complete lack of a regulatory environment for fracking in the province, including: targeted guidelines; permitting regulations; disclosure and reporting of chemicals; regulations related to liability; and requirements for monitoring and reporting. This adds to the concern regarding the lack of safeguards to protect water and air quality, human health, and ecosystem health.

Lack of Baseline Information

There is a lack of baseline information on water and air quality in rural Newfoundland. Long-term monitoring of air and water quality, including freshwater, marine, and coastal waters is also lacking.

Infrastructure Impacts

Increased truck traffic, pressure on infrastructure such as roads, bridges, water supplies, and waste disposal sites are further concerns for local communities.

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Photo courtesy Aiden Mahoney

Updates and Articles on Fracking

The Call for an Independent, Science-based Review

Media backgrounder for NLFAN Press Conference *(continued from the previous page)*

Pollution of groundwater and surface water

Fracking operations use hazardous chemicals and produce wastewater that requires specialized storage, treatment, and disposal. Naturally-occurring radioactive elements, heavy metals, and saline fluids can be released in the produced water and flow-back. There are currently no facilities in Newfoundland that can treat hazardous liquid wastes generated from fracking operations. Leaks, spills, runoff, well casing failures, and communication between wells and fractures have plagued fracking operations across the globe. With onshore to offshore drilling proposed, risks include threats to commercial and food fisheries, drinking water, and ecosystem health.



Additional reasons to ask for an independent, Science-Based Review

Health Impacts

There are known carcinogens, biocides, neurotoxins, and endocrine disruptors among the hundreds of chemicals used in fracking. Peer-reviewed studies have linked health effects with proximity to fracking. Concern about the unreported and therefore unregulated use of chemicals was highlighted in the 2012 Fall Report of the Commissioner of the Environment and Sustainable Development. In Canada, chemicals used in fracking are not currently reported under the National Pollutant Release Inventory. Environment Canada launched a review of the National Pollutant Release Inventory in 2011, including considerations of substances used in hydraulic fracturing. The results of the review are expected in 2014. Environment Canada and Health Canada have begun to develop a list of over 800 substances known or suspected to be used in fracking.

Social Impacts

Boom-bust resource economies have proven to have negative social consequences in rural areas—degrading the way of life and increasing crime rates, sexually-transmitted diseases, and drug and alcohol use. The social and health costs remain a burden taxing the region and the provincial health and legal systems.

Air Quality

Fracking releases methane into the atmosphere. In addition to its health effects, methane is a powerful greenhouse gas, contributing to climate change.

Public Concern

Groups across the Gulf of St. Lawrence region are calling for moratoria or bans on fracking, including: Unifor, New Brunswick Federation of Labour, New Brunswick College of Family Physicians, PEI National Farmer Union, PEI Standing Committee on Agriculture, Forestry, Environment and Energy, the St. Lawrence Coalition, David Suzuki Foundation, and Council of Canadians, to name a few. Neighbouring provinces such as New Brunswick, Nova Scotia, and Québec have launched a range of reviews on fracking as a result of public concern.

Photo courtesy Aiden Mahoney

Updates and Articles on Fracking

The Call for an Independent, Science-based Review

For immediate release

May 15, 2014

Cross-sector groups unite to demand independent review of fracking

A province-wide network of organizations is calling for the provincial government to commission an independent review of hydraulic fracturing, a controversial technology proposed for use in oil exploration on Newfoundland's west coast. The groups outlined their concerns at a news conference in Corner Brook today, citing examples from two recent reports.

“The recent report by the Council of Canadian Academies clearly shows major gaps in scientific knowledge of hydraulic fracturing. This federally commissioned report recommends we move slowly. Unfortunately, we have received the opposite view from the Canada-Newfoundland Offshore Petroleum Board who have concluded that oil exploration including hydraulic fracturing can proceed as usual, despite the scientific gaps that exist around that technology,” said Simon Jansen, spokesperson for the Newfoundland and Labrador Fracking Awareness Network.

In November of 2013 the government of Newfoundland and Labrador announced that they would not accept any applications for oil exploration that involved hydraulic fracturing (fracking) until they completed an internal review.

On May 1, the Council of Canadian Academies released their report on the Environmental Impacts of Shale Gas Extraction in Canada. The Council is a not-for-profit organization that supports independent, science-based, authoritative expert assessments. The report notes that few peer-reviewed articles on the environmental impacts of shale gas development have been published. They stress that society's understanding of the potential environmental impacts has not kept pace with development, resulting in gaps in scientific knowledge about these impacts. The expert panel also states that the health and social impacts of shale gas development have not been well studied.

The latest Strategic Environmental Assessment (SEA) for oil and gas exploration in Western Newfoundland released May 5 by the Canada - Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) does not assess the environmental and health impacts of hydraulic fracturing.

In reaction to these reports an unprecedented number of organizations including labour, tourism, health, fishery, religion, conservation and environment have united to demand that the planned review of hydraulic fracturing for this province be external, independent, and science-based.

The groups involved:

- Atlantic Salmon Federation
- Canadian Parks and Wilderness Society
- Coalition for Alternatives to Pesticides NL
- Council of Canadians, St. John's Chapter
- East Coast Fracking Awareness Group
- Go Western Newfoundland (Western
- Destination Management Organization)
- Gros Morne Coastal Alliance
- Hospitality Newfoundland and Labrador
- Mercy Centre for Ecology and Justice
- Mi'kmaq Cultural Leader
- Newfoundland and Labrador College of Family Physicians
- Port au Port / Bay St. George Fracking Awareness Group
- Port aux Port Bay Fisheries Committee
- Public Service Alliance of Canada
- Sierra Club, Atlantic Chapter
- Social Justice Co-operative, St. John's
- St. Lawrence Coalition
- Western Environment Centre

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Updates and Articles on Fracking

The Call for an Independent, Science-based Review

Cross-sector groups unite to demand independent review of fracking *(continued from the previous page)*

"I am pleased that the Council of Canadian Academies is letting the federal and provincial governments know that the concerns of their constituents are backed up by peer-reviewed science. Unfortunately, even though they commissioned this scientific study, they are not showing the leadership necessary to protect residents and communities. This leaves it to our provincial governments to take leadership on this issue," notes Gretchen Fitzgerald from the Sierra Club.

The Board of Directors of Go Western Newfoundland, an organization representing more than 600 registered tourism operators along the west coast of Newfoundland, are asking for a hold until "an independent, science-based, comprehensive assessment of all aspects of the project be conducted."

"In light of the lack of scientific knowledge outlined by the Council of Canadian Academies, we have serious concerns about hydraulic fracturing and its potential impact on workers' health and safety as well as our drinking water," says Jeannie Baldwin, Atlantic regional executive vice-president of the Public Service Alliance of Canada.

"We want a commitment from government for an external, public, independent review. The public deserves nothing less," said Wayne Hounsell of the Port au Port/Bay St. George Fracking Awareness Group. "The government is currently conducting a number of public reviews, for example on power outages and Bill-29. Surely public concern over fracking and the future of the west coast of Newfoundland are just as important. Premier Marshall has asked for the public to give him feedback. That is what these sixteen groups are doing," he adds.

Media contact: Simon Jansen info@nlfan.ca 709-639-4293



Photo courtesy Aiden Mahoney

The Bakken Formation: the methane-flaring from thousands of oil-fracking wells in North Dakota, seen from outer space, showing comparisons with light emitted from major urban centers.

How to get involved in fracking awareness

1. Read the reports on fracking (for these, start with <http://savewestcoastnl.wordpress.com/>)
2. Attend the fracking awareness meetings and presentations
3. Call your MHA and MP
4. Write to your MHA and MP
5. Speak with your town council
6. Check regularly the relevant websites on fracking on the west coast.
7. Tell your friends
8. See the Council of Canadians Fractivist's Toolkit:
<http://www.canadians.org/blog/fractivist-toolkit-how-you-can-take-action-protect-water-and-stop-fracking>

Check out the **Port au Port/Bay St. George Fracking Awareness Group** on Facebook for useful links and information!

Save Gros Morne and Our West Coast Facebook Site

Save Gros Morne and our West Coast aims to disseminate timely information on proposals to conduct horizontal slick-water hydraulic fracturing (fracking) along the West coast of Newfoundland.



See their facebook site for updates,

news, announcements, videos, photos, and especially an extensive list of resources relating to fracking dealing with many aspects of the topic (public health, fracking chemicals, what is happening in other provinces, and so on). It's a wonderful resource!

<https://www.facebook.com/SaveGrosMorne>

<http://savewestcoastnl.wordpress.com/>

Photo courtesy Natalie Thomas

Company websites and information:

Shoal Point Energy
<http://www.shoalpointenergy.com/>

Black Spruce Exploration
<http://www.blspexp.com/>

for the scoping document and project description, visit
<http://www.cnlopb.nl.ca/environment/bsespe.shtml>

The St. Lawrence Coalition

From their mission statement: The St. Lawrence Coalition was created to persuade government bodies to issue a moratorium on oil and gas exploration and exploitation in the Gulf of St. Lawrence as soon as possible. The St. Lawrence Coalition aims at bringing the gulf communities together, which share the same concerns and appreciate the natural resources of the Gulf of St. Lawrence. Our coalition is inter-provincial as five provinces are involved: Prince Edward Island, New Brunswick, Nova Scotia, Québec, and Newfoundland and Labrador.

website: <http://www.coalitionsaintlaurent.ca/en/coalition>

e-mail: coalitionstlaurent@me.com

Sylvain Archambault phone (418) 686-1854; cell (581) 995-4350



The Boreal Ecosystem Research Facility opens at Grenfell Campus (MUN)

One senses certain anticipatory excitement walking into the new Boreal Ecosystem Research Facility (BERI), located at the Grenfell Campus in Corner Brook. Much of the equipment is still in pieces or packed away in boxes. With research projects in the process of being prepared and some equipment still undelivered, BERI has an almost “new car smell.” This is an \$8.1 million facility, with over 3 million of that coming from government sources. But, what does this brand new addition to the university mean for the community, for MUN, and for the province?

The facility itself consists mainly of three labs designed for the preparation, extraction, and analysis of a large quantity of different soil, gas, and plant samples. What makes this facility unique is the assemblage of state-of-the-art equipment and technology under one roof which, combined with expertise, will contribute to important agricultural, environmental and forestry research. The new facility is among the best of its kind in Canada.

What is notable about the BERI facility are the collaborative possibilities it offers, not only through MUN's partnership with Natural Resources Canada, but also in BERI's applicability to agricultural and forestry research across boreal zones. For instance, the similarities between Newfoundland, Norway, and Iceland in terms of climate and growing conditions make collaborative research between these regions an advantageous endeavour—one which BERI could play a large role in. As well, the facility is not restricted to BERI research exclusively. Other researchers in other faculties at MUN also can avail of the possibilities created by the new labs.

I had an opportunity to speak with Dr. Mumtaz Cheema, an agronomist with the Environmental Policy Institute about the types of research we might see coming from BERI. One of Dr. Cheema's areas of research focuses on dairy production within the province. As we well know, food security is a continuing issue in Newfoundland and Labrador. Currently, dairy farmers on the Rock are only producing between 5-10% of their own feed, having to import the remainder from the mainland. This not only contributes to a high degree of precarious dependence, but also higher milk prices at the checkout. With the new facility, it will soon be possible to observe phosphorous levels in cropland soil, compare the growth and development of various strains of hybrid feed crops, and observe the various nutrition levels of different feed types (to name but a few possibilities). In turn, pertinent information could be made available to farmers to aid them, for example by increasing the quality and quantity of their own feed production while decreasing their dependence on imported feed. At the same time, close monitoring of phosphorous levels in the soil can help manage fertilizer levels so that fields are not over-fertilized (a problem which can lead to drinking water and ecosystem contamination).

These labs also offer possibilities for important climate change research. Everything from measuring the identities and quantities of greenhouse gases produced under various field conditions to comparing plant growth under different atmospheric CO₂ levels, BERI may play a role in developing better agricultural and forestry practices in the harsh and changing environments of this province.

(continued on the next page)



Grenfell Campus Vice-President Dr. Mary Bluechardt, Premier Tom Marshall, and MUN President Dr. Gary Kachanoski at the opening of the facility (photo courtesy Lori-Lee Hollett)

There is no doubt that, over time, students and researchers will be attracted to the wide range of possibilities that this new facility has to offer. Although BERI is in its infancy, it could grow into an important hub of research and development relating to environmental and economic sustainability in the forestry and agricultural sectors of boreal zones.

Stephan Walke

Helping WEC as you recycle

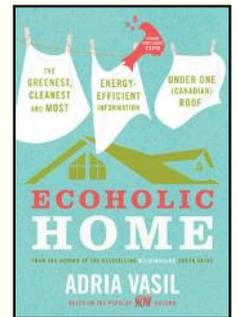
Here is a creative way to donate to WEC financially. WEC has an account at Scotia Recycling on 55 Maple Valley Rd (709-634-2025). When dropping off your recyclables, donate by telling the people at the desk that you wish to give the proceeds to the Western Environment Centre. Visit the Scotia Recycling website:



<http://scotiarecyclinggroup.com/services-by-location>. For information on recycling on Corner Brook, visit <http://www.cornerbrook.com/default.asp?mn=1.24.100> or phone their recycling line at (709) 637-1630.

A Great Guide for your Home!

“**ECOHOLIC HOME** gives homeowners, renters, condo nesters and even you dorm dwellers all the most up-to-date Canadian product and service info you need to eco-fy your private space—all while pocketing planet-friendly cash savings. So stop stewing in toxins, chucking energy out the window and feeding the trash treadmill, and start transforming your abode into an **ECOHOLIC** haven” (from the book’s website).



Five great ways to get involved in WEC

1. Join one of the working committees
2. Join the Facebook group and invite others to do the same
3. Attend WEC events
4. Become a WEC volunteer
5. Participate in the WEC community garden

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Annual Membership Form

Type of Membership: New Renewal Lapsed
annual membership fee: \$10.00

Name: _____

Address: _____

Phone number (with area code): (____) _____

E-mail address: _____

Would you like to be added to our e-mail list? Yes No

What environmental issues interest you the most?

Coastal habitat Wildlife Energy
Urban Planning Community Garden Forestry
Climate Change Farmers' Market Transportation

Other: _____

Would you be willing to help out with WEC events? _____

Would you be interested in sitting on any of the following WEC committees or working groups:

Events Fundraising Farmers' Market

Newsletter Committee Community Garden

Are you interested in becoming a Board Member? Yes No

How did you hear about WEC? _____

Do you have any additional information for WEC?

To learn more about WEC, visit www.wecnl.ca or join us on Facebook or Twitter.

Benefits of Membership

- Receive updates on WEC events and activities
- Receive our newsletter
- Access to WEC resources
- Become part of a growing organization that is committed to protecting the environment in Western Newfoundland and elsewhere

Office Use Only

Date: _____

Origin (e.g. walk-in):

Payment method:

Cash Cheque

Memberships expire after 1 year.

Please return form & payment to:

The Western Environment Centre,
Suite 6, 86 West Street (2nd floor)
Corner Brook, NL, A2H 2Z3
E: info@wecnl.ca
T: (709) 639-0937

WEC will protect your private information. We never share or sell our membership lists.

