



# **Standing Committee on Resources**

---

*ANNUAL REPORT*

*2016*

© **2016** Her Majesty the Queen in right of the Province of Nova Scotia  
Halifax

**ISSN: 0837-2551**

This document is also available on the Internet at the following address:

<http://nslegislature.ca/index.php/committees/reports/resources>



**Legislative  
Committees Office**  
House of Assembly  
Nova Scotia

PO Box 2630, Station M  
Halifax, Nova Scotia  
B3J 3P7  
Telephone: (902) 424-4432  
Fax: (902) 424-0513

Hon. Kevin Murphy  
Speaker  
House of Assembly  
Province House  
Halifax, Nova Scotia

Dear Mr. Speaker:

On behalf of the Standing Committee on Resources, I am pleased to submit the Annual Report of the Committee for the period from September 2015 to August 2016 of the Sixty-Second General Assembly.

Respectfully submitted,

A handwritten signature in cursive script, reading "Suzanne Lohnes-Croft".

Ms. Suzanne Lohnes-Croft, MLA  
Lunenburg  
Chair  
Standing Committee on Resources

Halifax, Nova Scotia  
2016

## TABLE OF CONTENTS

Introduction	ii
Membership	ii
Membership Changes	ii
Procedures and Operations	ii
Notices, Transcripts and Reports	iii
Research Material	iii
Acknowledgements	iii
<b>PUBLIC HEARINGS</b>	
<b>October 15, 2015</b>	<b>1</b>
Medway Community Forest Cooperative Re: Community Forest Pilot Project	
<b>November 5, 2015</b>	<b>3</b>
Shell Canada Limited and Canada-Nova Scotia Offshore Petroleum Board Re: Capping of Offshore Exploratory Wells	
<b>January 21, 2016</b>	<b>6</b>
Wild Blueberry Producers Association of Nova Scotia Re: Wild Blueberry Sector	
<b>February 18, 2016</b>	<b>8</b>
Dairy Farmers of Nova Scotia	
<b>March 24, 2016</b>	<b>10</b>
Department of Energy Re: Ocean Technology and Tidal Research	
<b>June 9, 2016</b>	<b>12</b>
Bay of Fundy Inshore Fishermen’s Association and Fundy Ocean Research Center for Energy Re: Environmental Monitoring in the Bay of Fundy	
<b>STATEMENT OF SUBMISSION</b>	<b>17</b>
<b>APPENDICES</b>	
Appendix A – Motions	19
Appendix B – Documentation	21

## INTRODUCTION

The Standing Committee on Resources, an all-party Committee of the House of Assembly, was struck at the beginning of the First Session of the Sixty-Second General Assembly. Pursuant to Rule 60(2)(e) of the *Province of Nova Scotia Rules and Forms of Procedure of the House of Assembly*:

(e) The Resources Committee is established for the purpose of considering matters normally assigned to or within the purview of the Departments and Ministers of Agriculture and Marketing, of the Environment, of Fisheries and of Natural Resources. 1987 R. 60(2); am 1993; am. 1996

## MEMBERSHIP

There shall be no more than nine Members of the Legislative Assembly appointed to this committee. The current membership of the Resources Committee is as follows:

Ms. Suzanne Lohnes-Croft (Chair)  
Lunenburg

Hon. Pat Dunn, MLA  
Pictou Centre

Mr. Terry Farrell, MLA (Vice Chair)  
Cumberland North

Mr. John Lohr, MLA  
Kings North

Mr. Stephen Gough, MLA  
Sackville-Beaver Bank

Hon. Sterling Belliveau, MLA  
Queens-Shelburne

Mr. Bill Horne, MLA  
Waverley-Fall River-Beaver Bank

Ms. Lenore Zann, MLA  
Truro-Bible Hill-Millbrook-Salmon River

Mr. Derek Mombourquette, MLA  
Sydney-Whitney Pier

## MEMBERSHIP CHANGES

Ms. Suzanne Lohnes-Croft replaced Mr. Gordon Wilson as Chair of the committee in May 2016.

## PROCEDURES AND OPERATIONS

The Resources Committee traditionally meets once a month. These meetings are usually held on the third Thursday of the month in the Legislative Committees Office.

## NOTICES, TRANSCRIPTS AND REPORTS

### NOTICES

Notices of committee meetings are sent to all members of the committee, caucus office staff, legislative staff and Communications Nova Scotia. The notices are also posted in Province House and are on the Nova Scotia Legislature web site at the following address:

<http://nslegislature.ca/index.php/calendar/>

### TRANSCRIPTS

Transcripts of the Resources Committee meetings are available from the Legislative Library in Province House, the Legislative Committees Office or on the Resources Committees' web page at the following address:

[http://nslegislature.ca/index.php/committees/committee\\_hansard/C10](http://nslegislature.ca/index.php/committees/committee_hansard/C10)

### REPORTS

All reports of the Standing Committee on Resources are compiled by the Legislative Committees Office and forwarded to committee members for consideration. Upon completion of the review and approval of the report, the Chair tables the report with the Speaker of the House of Assembly or with the Clerk of the House of Assembly.

Distribution of the report is as follows:

To the Speaker and the Clerk of the House of Assembly, committee members, all witnesses who appeared before the committee, the Nova Scotia Legislative Library, caucus offices and the media. This report is available to the general public upon request from the Legislative Committees Office, and is available on the Resources Committee web page at the following address:

<http://nslegislature.ca/index.php/committees/reports/resources>

## RESEARCH MATERIAL

All research for the Resources Committee is compiled by the Legislative Library in consultation with the committee clerk. Research material is compiled in electronic format and is distributed by the committee clerk prior to the meeting to committee members, staff and witnesses.

## ACKNOWLEDGEMENTS

The committee wishes to extend its gratitude to all witnesses for their time and co-operation. Special appreciation is extended to the Legislative Committees Office; Hansard Reporting Services; Legislative Television and Broadcast Services; and the Nova Scotia Legislative Library.

# **PUBLIC HEARINGS**

**WITNESSES**

**Medway Community Forest Co-operative**

Mr. Will Martin – Board Chairman

Ms. Mary Jane Rodger – Forest Manager

**MATTERS OF DISCUSSION**

Representatives from the Medway Community Forest Co-operative (MCFC) appeared before the committee to discuss the work that is being done to develop the Co-operative. The MCFC is a for-profit co-operative in its first year of a three-year license agreement with the Province of Nova Scotia. The land identified for the initiative was a result of the closure of the Bowater Mill on the South Shore of Nova Scotia, totaling an area of 550,000 hectares. The MCFC forest management project is aimed to focus on promoting the restoration of the Acadian Forest and is seen as an economic development opportunity for rural Nova Scotia communities. The Co-op is an economic venture to generate a value-added timber supply and new business opportunities from a working forest. The Co-op is run by local shareholders and holds a nominal share price of \$25. All profits earned by the Co-op are not distributed as dividends, they are reinvested into the local community.

All community forests operate on four key principles, 1) Direct management by the community, 2) local economic benefits, 3) forests are managed for multiple values, and 4) strong commitment to environmental stewardship. It is the MCFC's mission to support local community through sustainable and ecologically-based forest management while finding a new business model for managing Crown Lands.

**COMMITTEE BUSINESS**

The 2015 Annual Report of the Standing Committee on Resources was reviewed. A motion was introduced:

- That the committee accept the annual report as tabled.
  - Moved by Mr. Bill Horne, MLA
  - Motion carried

It was agreed that the committee would not meet during the House session.

The committee received two pieces of correspondence from the Honourable Sterling Belliveau. The first piece of correspondence was a request that the committee consider adding the capping of offshore exploratory wells as a topic for future discussion, with officials from the Canada-Nova Scotia Offshore Petroleum Board appearing as a witness. The second piece of correspondence - a follow-up to the initial letter - requested that the topic of capping offshore exploratory wells



be addressed immediately and the topic be added as an emergency committee meeting. Discussion was held regarding identifying the meeting as an 'emergency' as well as the possibility of the committee inviting both the Canada-Nova Scotia Offshore Petroleum Board and Shell Canada as witnesses for a meeting on November 5<sup>th</sup>. Stemming from the correspondence, a motion was introduced:

- To invite the Canada-Nova Scotia Offshore Petroleum Board to appear before the Standing Committee on Resources, on an emergency meeting basis, to discuss the capping of exploratory wells in the offshore and any dispersants which may be used in the event of a blowout, to ensure that the topic is addressed before a decision is made by the Canada-Nova Scotia Offshore Petroleum Board.
  - Moved by the Hon. Sterling Belliveau, MLA
  - Motion defeated

Following the defeat of the motion the committee agreed to hold a meeting on November 5<sup>th</sup> and invite the Canada-Nova Scotia Offshore Petroleum Board and Shell Canada in as witnesses to discuss the capping of offshore exploratory wells. As two witnesses would be scheduled to appear for the November 5<sup>th</sup> meeting the committee agreed to extend the meeting an extra hour and that the meeting would be scheduled for 9:00 am to 12:00 noon.

At the September meeting of the Committee on Assembly Matters, a new agenda setting procedure was set out in a letter issued by the Government House Leader. The letter outlined the number of topics each party would receive based on a six meeting rotation and the order in which the meetings would be scheduled. It was agreed that the Resources Committee would continue with the topics that were selected at the June 18<sup>th</sup>, 2015, agenda setting session as they fell in line with the process outlined in the updated agenda setting procedure.

## **DOCUMENTATION**

No documents/information were requested.

## **TRANSCRIPT**

A transcript for this meeting can be found online at the following address:

[http://nslegislature.ca/index.php/committees/committee\\_hansard/C10/re2015oct15](http://nslegislature.ca/index.php/committees/committee_hansard/C10/re2015oct15)

**WITNESSES**

**Shell Canada Limited**

Ms. Christine Pagan – Atlantic Canada Venture Manager  
Ms. Tara Barnett – External Relations Manager  
Mr. Rob Van Scherpenseel – Wells Operations Manager  
Mr. Scott Jardine – Health, Safety and Environment Manager

**Canada-Nova Scotia Offshore Petroleum Board**

Mr. Stuart Pinks – Chief Executive Officer  
Mr. Paul Taylor – Board Member (Provincial)  
Mr. Eric Theriault – Advisor, Environmental Affairs  
Ms. Kathleen Funke – Advisor, Communications

**MATTERS OF DISCUSSION**

Prior to question period a motion to extend the meeting time was introduced:

- That the committee extend the Q & A by 30 minutes – 15 minutes for each presenter.
  - Moved by Hon. Sterling Belliveau, MLA
  - Motion defeated

Shell Canada Limited and the Canada-Nova Scotia Offshore Petroleum Board appeared before the committee to discuss capping of offshore exploratory wells, focusing on the wells at the Shelburne Basin Drilling Project on the South Shore of Nova Scotia.

As two witnesses were scheduled to present, the meeting was broken into two time periods allowing for equal time between witnesses; Shell Canada presented first.

In the past five years, Shell has drilled 200-300 deep water wells and in 2013 Shell Canada was awarded six exploration licenses in Nova Scotia following a competitive bid process which was underpinned by the Play Fairway Analysis project directed by the Province of Nova Scotia. To date, Shell is in the beginning stages of drilling the first well – Cheshire Well – 250 kms off the coast of Nova Scotia which will be followed closely by a second well – Monterey Jack. The exploration of the first two wells will take approximately 10 months. Shell Canada is planning to invest approximately \$1 billion in the first six years of their nine-year license period.

A primary concern with drilling deep water wells off the coast of Nova Scotia is the absence of immediate access to a capping stack if it is needed to respond to a well blowout. A capping stack is a blowout response mechanism that was invented in response to the well blowout at Macondo Prospect – the Deepwater Horizon explosion. Since the 2010 Deepwater event a capping stack has not been required anywhere else in the world. There are four capping stacks globally stationed at strategic locations where there are high levels of oil and gas activities; Stavanger,

South Africa, Brazil and Singapore. Storing capping stacks at these specific locations allows a stack to be deployed immediately to any location in the world. Each capping stack weighs approximately 100 tons, costs approximately \$20-\$30 million and requires a heavy lift construction vessel to transport.

Shell Canada outlined the steps which would be taken in a situation where emergency or spill response measures are required, beginning with the blowout preventers (BOP). A BOP obviates the need for a capping stack as the BOP would effectively be the system to shut a well down. A BOP is installed in a well at the sea floor and is present the entire time a well is being drilled. BOP's can be activated automatically or remotely if there is indication that a well is experiencing any type of problem, and once activated can shut down a well in 45 seconds.

Alternate methods that could be used in response to an incident include, mother nature (natural remediation), mechanical intervention (booms and skimmers), burning and dispersants. Shell Canada would require approval from the Canada-Nova Scotia Offshore Petroleum Board prior to using burning or dispersants as a response method. All of Shell's well sites are connected and monitored 24/7 by Real Time Operations Centres, with locations in Halifax, Houston, New Orleans and Calgary. Each centre has the ability to intervene with a well any time a problem is identified.

The use of a capping stack is viewed as a last resort when responding to an incident as various other methods would be employed to stop a blowout prior to requiring a capping stack. However, in the event of an emergency, Shell would begin the immediate mobilization of a capping stack so it is available if all other response efforts fail to stop the blowout. The capping stack that would be mobilized for the Shelburne Basin project is managed by a consortium in Stavanger, Norway. The deployment time it would take for the capping stack to get from Stavanger to Nova Scotia is approximately eight days.

The Canada-Nova Scotia Offshore Petroleum Board presented to the committee following Shell Canada.

The Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) is an independent joint agency of both the Governments of Canada and Nova Scotia and is responsible for the regulation of petroleum activities in the Nova Scotia Offshore Area. The CNSOPB was established in 1990 under federal-provincial legislation. The board is responsible for the health and safety of offshore workers, environmental protection, employment and industrial benefits, issuing licenses for exploration and development, resource management, conservation evaluation and data management and support.

The CNSOPB was responsible for reviewing the application submitted by Shell Canada to acquire the license to drill deep water wells off the coast of Nova Scotia. Under the Drilling and Production Regulation, it was CNSOPB's responsibility to determine if Shell Canada takes all reasonable precautions to ensure safety and environmental protection while drilling and responding to emergency situations.

After reviewing Shell Canada's application CNSOPB determined that Shell has lowered the risks of operations in the offshore to as low as reasonably practicable with an emergency response time of 13 days.

## **COMMITTEE BUSINESS**

The following correspondence was received and accepted by the committee:

- Full copy of the license agreement between the Province of Nova Scotia and the Medway Community Forest Co-op.

At the October 15<sup>th</sup>, meeting the committee agreed to move forward with the topic list that was approved at the June 18<sup>th</sup>, 2015, agenda setting session and to follow the agenda setting procedures outlined in the letter tabled by the Government House Leader at the September Assembly Matters Committee. However, as the new procedures indicate that the Liberal Party will have three topics based on a six meeting rotation and the Progressive Conservative Party will have two topics, both parties were short an approved topic. Motions were introduced to approve the additional agenda topics:

- Mining Association of Nova Scotia
  - Moved by Mr. John Lohr, MLA
  - Motion carried
- Cape Breton Private Land Partnership, with the Department of Natural Resources as a witness
  - Moved by Mr. Bill Horne, MLA
  - Motion carried

## **DOCUMENTATION**

No documents/information were requested.

## **TRANSCRIPT**

A transcript for this meeting can be found online at the following address:

[http://nslegislature.ca/index.php/committees/committee\\_hansard/C10/re2015nov05](http://nslegislature.ca/index.php/committees/committee_hansard/C10/re2015nov05)

**WITNESSES**

**Wild Blueberry Producers Association of Nova Scotia**

Mr. Peter Rideout – Executive Director

Mr. Barron Blois – President

**MATTERS OF DISCUSSION**

Members from the Wild Blueberry Producers Association of Nova Scotia (WBPANS) provided an overview of the Wild Blueberry sector, the organization and its strategic initiatives for the coming years.

Wild blueberries only grow in northern North America, with the commercial range of the wild blueberry industry focused in the region of the State of Maine, the Maritime Provinces, Newfoundland and Quebec. This region has created a unique product in that it is one of the few areas in the world where a naturally growing wild crop has been transformed into an important commercial industry.

The WBPANS was founded in 1970 to promote industry growth and development, production research, health promotion, regional engagement, market development and advocacy. WBPANS represents 1,100 producers/landowners of wild blueberries who manage approximately 44,000 acres of land in Nova Scotia. In 2015, Nova Scotia producers harvested a record crop of 65 million pounds of blueberries resulting in a farm gate value of \$32.5 million.

There has been tremendous growth in production in the wild blueberry industry, growing from a production value of 40 million pounds in 1980 to 325 million pounds in 2014. 95% of wild blueberries are frozen at harvest and 90% of the Canadian wild blueberry industry is focused on the export market, with exports to approximately 30 countries. Export sales for Nova Scotia in 2014 were \$113 million, making wild blueberries the largest agricultural export for the province.

The key strategic priorities for 2016-2018 have been set out by WBPANS. They include:

- Farming Better Land
- Supporting Farm Profitability
- Regional Relations and Co-operation
- Wild and Healthy Production
- Processor Relations
- Understanding Who We Are

**COMMITTEE BUSINESS**

The committee agreed that the March meeting date would be moved to March 24<sup>th</sup> as the regular date falls during March Break.

**DOCUMENTATION**

No documents/information were requested.

**TRANSCRIPT**

A transcript for this meeting can be found at the following address:

[http://nslegislature.ca/index.php/committees/committee\\_hansard/C10/re2016jan21](http://nslegislature.ca/index.php/committees/committee_hansard/C10/re2016jan21)

**WITNESSES**

**Dairy Farmers of Nova Scotia**

Mr. Andrew McCurdy – Chair

Mr. Brian Cameron – General Manager

**MATTERS OF DISCUSSION**

Dairy Farmers of Nova Scotia (DFNS) provided an overview of the Nova Scotia Dairy Industry. DFNS was formed in 2001. Each Canadian province has a producer milk marketing board and these boards contribute annually to dairy product promotion.

DFNS buys and sells all raw milk in the province, they set farm gate prices, license producers and transporters and manage the quota to match production to market needs. Nova Scotia has 220 dairy farms which employ 600 full-time employees. Over the past five years there has been a 2% year over year growth in the milk quota.

The Canadian dairy industry introduced a national plan for marketing milk and supply management in the early 1970's. Supply management is enacted through Federal/Provincial agreements and provides a stable supply of high quality product at a fair price to consumers, retailers, processors and producers. Supply management allows for market stability and predictability and to maintain production in all provinces. In 1996, through the national plan, dairy producers organized themselves into regional pools. Each pool shares milk revenues equally across all producers, as well as market growth, which is matched by quota. Pools also share selected costs and many policies, thereby eliminating provincial borders. The Western Milk Pool includes British Columbia, Alberta, Saskatchewan and Winnipeg. Nova Scotia dairy farmers are a part of the P5 pool which includes Ontario, Quebec and the Maritime provinces. The Nova Scotia Dairy industry comprises 2.9% of the P5 quota and 2.2% of the overall Canadian dairy market.

With stable growth over the past five years, the industry is facing new challenges in the form of two major international trade deals; Comprehensive Economic Trade Agreement (CETA) and the Trans-Pacific Partnership (TPP). CETA has further opened the border to European cheese and, once ratified, will be phased in over five years. The amount of imported cheese will increase by 4% under the trade agreement. The TPP will directly impact the dairy industry with increased dairy imports of 3.5% - 4% over five years. Once ratified by the federal government these trade agreements will require the dairy industry to adjust to the more open borders.

**COMMITTEE BUSINESS**

There was no committee business.

**DOCUMENTATION**

No documents/information were requested.

**TRANSCRIPT**

A transcript of this meeting can be found online at the following address:

[http://nslegislature.ca/index.php/committees/committee\\_hansard/C10/re2016feb18](http://nslegislature.ca/index.php/committees/committee_hansard/C10/re2016feb18)



**WITNESSES**

**Department of Energy**

Mr. Murray Coolican – Deputy Minister

Ms. Sandra Farwell – Director, Sustainable and Renewable Energy

Ms. Sheila Paterson – Special Projects Executive

**Department of Business**

Mr. Kent Roberts – Managing Director, Sector Development & Entrepreneurship

**MATTERS OF DISCUSSION**

With 7,579 kilometers of coastline and 1 in 7 jobs directly or indirectly linked to ocean industries, Nova Scotia specializes in the oceans area. The ocean sector represents approximately 15%, or \$5 billion dollars per year, of Nova Scotia's GDP. Nova Scotia's relationship with the ocean has created a diverse range of industries for the province including fisheries, aquaculture, seafood processing, trade and transportation, shipbuilding, the Canadian Navy, tourism, energy, offshore oil and gas, renewable energy development, and science and observation. All of these industries have a strong reliance on the ocean and Nova Scotia's proximity to it.

Nova Scotia's ocean technology sector and supply chain – which includes more than 300 companies – is recognized globally. The sector is innovative, competitive and employs a skilled and experienced workforce. Over the past number of years Nova Scotia has set aggressive targets to reduce greenhouse gas emissions from the generation of electricity in the province. The success the province has had in meeting these targets has allowed Nova Scotia to be at the forefront of the county in reducing greenhouse gas emissions. In addition to focusing on reducing greenhouse gas emissions, the province has put in place renewable energy targets, so 25% of Nova Scotia's energy comes from renewable energy in 2015, and 40% by 2020. The target set for 2015 was exceeded and it is expected that the 2020 target will be achieved.

With the Bay of Fundy as a resource, developing marine renewable energy is a strategic focus for the Province. On a rising tide approximately 160 billion tons of seawater flow into the Bay of Fundy with currents at a speed as high as five meters per second. It is believed that there are 2,500 megawatts – twice the total energy consumption of Nova Scotia – of commercial potential within the tides, and it is expected that this industry could generate \$1.7 billion in GDP over the next 25 years. Twenty-five megawatts of energy has been approved for development in the Bay of Fundy over the next five years. The work involved in exploring and capturing the energy could result in more than \$110 million being spent in Nova Scotia over the next five years.

Ocean technology and tidal energy hold tremendous potential for Nova Scotia. Nova Scotia is a small market with huge tidal resources. With research being conducted and companies

developing new tidal technologies in the province it is believed that Nova Scotia has the opportunity to create renewable energy that can be used locally and exported globally.

### **COMMITTEE BUSINESS**

It was agreed that the committee would not meet while the House is in session.

### **DOCUMENTATION**

No documents/information were requested.

### **TRANSCRIPT**

A transcript of this meeting can be found online at the following address:

[http://nslegislature.ca/index.php/committees/committee\\_hansard/C10/re2016mar24](http://nslegislature.ca/index.php/committees/committee_hansard/C10/re2016mar24)

**WITNESSES**

**Bay of Fundy Inshore Fishermen's Association**

Mr. Colin Sproul – Spokesperson

Mr. David G. Coles – Q.C.

**Fundy Ocean Research Center for Energy**

Mr. Tony Wright – General Manager

Dr. Graham Daborn, Professor Emeritus, Acadia University

Mr. Stephen Dempsey – Executive Director, OERA

Ms. Elisa Obermann – Executive Director, Marine Renewables Canada

**MATTERS OF DISCUSSION**

A week prior to the June meeting, a letter from the NDP caucus was sent to the Chair of the committee requesting an emergency meeting with the Bay of Fundy Inshore Fishermen's Association (BoFIFA) and the Fundy Ocean Research Center for Energy (FORCE) to discuss environmental monitoring in the Bay of Fundy. It was agreed by the committee that there would not be an additional committee meeting to accommodate the request, instead the newly proposed witnesses would appear at the regularly scheduled June meeting in lieu of the approved witness, Nova Scotia Environment.

Due to not having quorum at the scheduled meeting time the meeting was delayed five minutes. A motion was introduced to extend the meeting by five minutes:

- To extend the meeting by five minutes.
  - Moved by Mr. John Lohr, MLA
  - Motion carried

As two witnesses were scheduled to present to the committee, the meeting was broken into two time periods allowing for equal time between witnesses; Bay of Fundy Inshore Fishermen's Association presented first.

The Bay of Fundy is an important spawning, nursery and feeding ground for many fish, mammals and invertebrate species, including various species-at-risk. The Minas Basin segment of the Bay of Fundy is the most important nursery for lobster larvae and many other commercially valuable species in Atlantic Canada. In 2014, \$464 million worth of lobster were taken from the Bay of Fundy on Nova Scotia's side alone.

With the impending implementation of tidal energy test turbines in the Bay of Fundy by FORCE, BoFIFA is concerned that no accurate comprehensive baseline data has been collected at the test site to adequately gauge the potential environmental impacts on marine life. A Spring 2016

review by the Federal Department of Fisheries and Oceans further supported these claims by showing findings of a number of environmental problems with FORCE's tidal project, and attesting that the quality of the baseline study was greatly inadequate and does not provide a thorough understanding of the marine environment of the Minas Passage nor the test turbine demonstration site.

BoFIFA has found multiple occurrences of breaches of regulatory framework by FORCE. These include, the failure to bury transmission lines or align them properly to mitigate barrier and electromagnetic field effects; transmission line diameters have exceeded limits; turbine dimensions have increased; and plans for additional turbines have been added at each test site without proper approval; required science on lobster behavior has not been completed or proposed and; an Environmental Monitoring Advisory Committee has never convened to review FORCE's updated plans.

BoFIFA is pro tidal and pro renewable energy, however, the possible threat to the fishing industry is a great concern. Tidal energy sites need to be ecologically chosen and tidal energy development needs to have a net benefit for both Nova Scotians and the environment. Due to insufficient environmental monitoring plans and inadequate baseline science, BoFIFA identifies the need for an arm's length independent oversight involving all affected stakeholders and community members in the industry. BoFIFA discussed the need for an accurate independent baseline study performed to highlight marine life in the Minas Passage. BoFIFA has asked government to halt the current turbine installation so that the required accurate information can be obtained.

The Fundy Ocean Research Center for Energy (FORCE) presented to the committee following BoFIFA.

With the impending deployment of two test turbines by FORCE in the Bay of Fundy, concerns have grown over the potential impacts the devices could have on the environment and marine life. FORCE provided an overview of their organization and the steps taken to address concerns from stakeholders such as BoFIFA.

To help address whether in-stream tidal technology should be a part of Nova Scotia's clean energy future, in a way that is safe for marine life and ensure that the Bay of Fundy can support tidal energy alongside important industries such as fishing, tourism and shipping, the Nova Scotia government created FORCE as a not-for-profit research center, set-up and regulated by the provincial government. Today, FORCE is Canada's leading test center for in-stream tidal energy technology, working with developers, regulators and researchers to study the potential for tidal turbines to operate within the Bay of Fundy.

FORCE's program has developed over the past ten years of engagement, beginning with a strategic environmental assessment that had consultations with Nova Scotian communities throughout the province. Through these consultations it became evident that an interest in exploring the Bay of Fundy as a source of energy existed, however, it called for a slow and incremental approach to tidal development, which FORCE has followed. To engage

communication and feedback with the communities, FORCE created an environmental monitoring advisory committee made up of 11 representatives from the scientific, First Nations, and fishing communities, a community liaison committee and a fishers liaison group. Furthermore, every environmental study conducted in relation to the Bay of Fundy (51 documents to date) have been posted online for the public.

In-stream tidal technology is the technology that has been demonstrated by FORCE for use in the Bay of Fundy. In-stream tidal is a newer technology that resembles slow moving underwater windmills which are placed in the natural flow of an ocean's current. These devices are both scalable and removable and take up approximately 0.06 of 1% of the cross-sectional area of the Minas Passage. Scientists involved with FORCE have indicated that any potential environmental impacts from an in-stream tidal turbine are so small that they would not be significant. To date, there has not been one instance of collision between marine life and an in-stream tidal turbine observed anywhere in the world.

FORCE's most recent monitoring program of the project – the third phase since 2009 – the organization has added five new studies to their database on fish, lobster, marine mammals, seabirds, and marine noise. These studies are the priority areas that as the first turbines are deployed will require the most attention. The five new studies include:

- Assessing fish distribution in the water and how their behavior is impacted by the turbine.
- Assessing the impact and the change of behaviour of harbour porpoises.
- Catchability of lobster – understanding the ability of fishermen to catch lobster in and around the turbines.
- Ability of seabirds and their response change to when the first turbine goes in.
- Amount of acoustic noise generated by the turbines.

The focus of these studies were created with the endorsement of Nova Scotia Environment, the Department of Fisheries and Oceans and FORCE's environmental monitoring advisory committee.

The recent report released by the Department of Fisheries and Ocean indicates, that prior to moving forward with the Bay of Fundy tidal project on a larger scale, there needs to be more in-depth research conducted. The extent to which is referenced in the report is beyond the mandate and scope of FORCE. FORCE is demonstrating tidal devices on a small scale and are positioned to help the government and public make informed decisions regarding the growth of the tidal energy industry in Nova Scotia. Any decision to move forward on a larger scale will not be made by FORCE but by regulators, fishers, communities and Nova Scotians. The concerns raised about the unknown effects the new technology and the turbines will have on the environment and marine life is understood and shared by FORCE. However, the most important information to help answer these concerns and inform any decision to go forward on a larger scale will come from demonstrating and monitoring the devices. This is understood and agreed to by both FORCE and the Department of Fisheries and Oceans.

## **COMMITTEE BUSINESS**

As the remaining approved witnesses are unable to appear before the committee on the regular meeting date in September, it was agreed that the committee would meet either, Thursday, September 8<sup>th</sup> or Tuesday, September 22<sup>nd</sup>, subject to witness availability.

The Mining Association of Nova Scotia offered to host the committee at the National Gypsum Mine in Milford for an informational tour in lieu of a regular committee meeting. This was agreed to by the committee. The tour will be scheduled for October.

## **DOCUMENTATION**

The following information was requested from the Bay of Fundy Inshore Fishermen's Association:

- The baseline studies and scientific proof that show the impacts on the Bay of Fundy.

## **TRANSCRIPT**

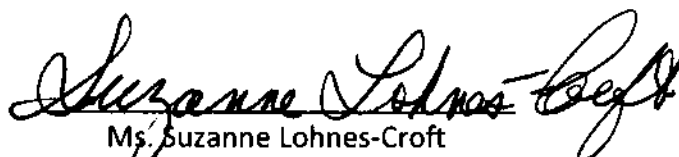
A transcript of this meeting can be found online at the following address:

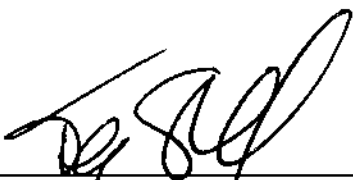
[http://nslegislature.ca/index.php/committees/committee\\_hansard/C10/re2016jun09](http://nslegislature.ca/index.php/committees/committee_hansard/C10/re2016jun09)

# **STATEMENT OF SUBMISSION**


**STATEMENT OF SUBMISSION**

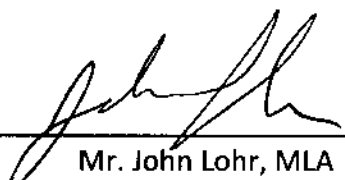
All of which is respectfully submitted to the House of Assembly  
On this 23 day of MARCH, 2017

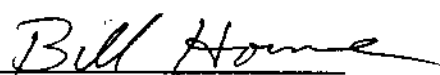
  
Ms. Suzanne Lohnes-Croft  
Lunenburg

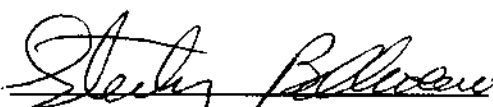
  
Mr. Terry Farrell, MLA – Vice Chair  
Cumberland North

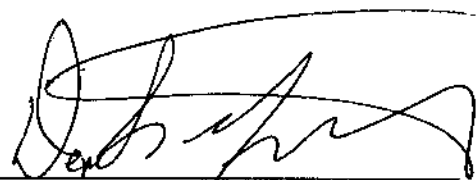
  
Hon. Pat Dunn, MLA  
Pictou Centre

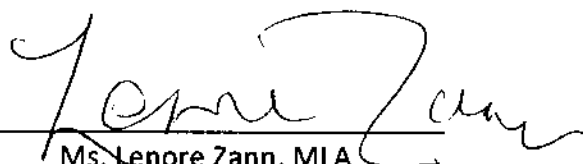
  
Mr. Stephen Gough, MLA  
Sackville-Beaver Bank

  
Mr. John Lohr, MLA  
Kings North

  
Mr. Bill Horne, MLA  
Waverly-Fall River-Beaver Bank

  
Hon. Sterling Belliveau, MLA  
Queens-Shelburne

  
Mr. Derek Mombourquette, MLA  
Sydney-Whitney Pier

  
Ms. Lenore Zann, MLA  
Truro-Bible Hill-Millbrook-Salmon River



# **APPENDICES**

## APPENDIX A - MOTIONS

The following is a list of motions introduced by the Standing Committee on Resources:

### October 15, 2015

The 2015 Annual Report of the Standing Committee on Resources was reviewed. A motion was introduced:

- That the committee accept the annual report as tabled.
  - Moved by Mr. Bill Horne, MLA
  - Motion carried

Correspondence was received by the committee requesting that the topic of capping offshore exploratory wells be addressed immediately and the topic be added as an emergency committee meeting. Discussion was held regarding identifying the meeting as an 'emergency' and the possibility of the committee inviting both the Canada-Nova Scotia Offshore Petroleum Board and Shell Canada as witnesses for a meeting on November 5<sup>th</sup>. Stemming from the correspondence a motion was introduced:

- To invite the Canada-Nova Scotia Offshore Petroleum Board to appear before the Standing Committee on Resources, on an emergency meeting basis, to discuss the capping of exploratory wells in the offshore and any dispersants which may be used in the event of a blowout, to ensure that the topic is addressed before a decision is made by the Canada-Nova Scotia Offshore Petroleum Board.
  - Moved by the Hon. Sterling Belliveau, MLA
  - Motion defeated

### November 5, 2015

Prior to question period a motion to extend the meeting time was introduced:

- That the committee extend the Q & A by 30 minutes – 15 minutes for each presenter.
  - Moved by Hon. Sterling Belliveau, MLA
  - Motion defeated

Both the Liberal and PC parties were short an agenda topic based on the new agenda setting procedures. Motions were introduced to approve additional agenda topics:

- Mining Association of Nova Scotia
  - Moved by Mr. John Lohr, MLA
  - Motion carried

- Cape Breton Private Land Partnership, with the Department of Natural Resources as a witness
  - Moved by Mr. Bill Horne, MLA
  - Motion carried.

**June 9<sup>th</sup>, 2016**

Due to not having quorum at the scheduled meeting time the meeting started five minutes late. A motion was introduced to extend the meeting by five minutes:

- To extend the meeting by five minutes.
  - Moved by Mr. John Lohr, MLA
  - Motion carried

## **APPENDIX B - DOCUMENTATION**

**June 9<sup>th</sup>, 2016**

**Bay of Fundy Inshore Fishermen's Association & Fundy Ocean Research Center for Energy**

The following information was requested from the Bay of Fundy Inshore Fishermen's Association:

- The baseline studies and scientific proof that show the impacts on the Bay of Fundy.

**LEGISLATIVE COMMITTEES OFFICE**

**PO Box 2630, Station "M"**

**Halifax, Nova Scotia**

**B3J 3P7**

**Telephone: (902) 424-4432 or Toll Free 1-888-388-6489**

**Fax: (902) 424-0513**

**Email: [legcomm@novascotia.ca](mailto:legcomm@novascotia.ca)**

**Web site: [http://nslegislature.ca/index/php/committees/standing\\_committees/resources](http://nslegislature.ca/index/php/committees/standing_committees/resources)**