Sept 18, 2013

Scott Tessier
Chair and CEO
Canada-Newfoundland and Labrador Offshore Petroleum Board
Fifth Floor, TD Place
140 Water St.
St. John's, NL A1C 6H6

Dear Mr. Tessier:

Thank you for the opportunity to respond to the CNLOPB's Strategic Environmental Assessment Update for western NL(2013).

We are very, very disappointed by the narrow, inadequate terms of reference for this SEA Update report, and the subsequent deficiencies in this environmental assessment.

The Gulf of St. Lawrence is a vital, sensitive ecosystem of great marine diversity, productivity and importance to the coastal communities of NS, NB, PEI, QC and NL. It is also a globally significant ecosystem in fragile health due to **ocean acidification and hypoxia** that requires immediate protection from further industrial development as well as restorative actions to maintain its sustainability.

Because the stakes are so high, a Strategic Environmental Assessment in the Gulf **must** be transparent, include extensive Gulf wide public engagement and seriously acknowledge the unknown implications from many gaps in scientific knowledge and understanding of how this complex ecosystem functions.

The acknowledgement in this SEA report of vulnerable marine mammals, rare turtles, lobster, krill, herring, capelin, redfish and plaice, to name a few, and cod ─ of special concern ─ in the designated western NL area, PROVES that this marine region is too sensitive a body of water for offshore oil and gas seismic surveys and exploratory drilling to proceed. We will explain more but first, we have to be honest and specific with you.

The public consultation process was severely flawed. For example, SOSS Coalition and the Gulf NS Herring Federation did not receive an invitation to the meetings held at the Board's discretion in Sydney NS, even though our ongoing efforts over the past three years helped to generate these very consultations. SOSS' PEI Branch was similarly excluded from the stakeholder meeting in Charlottetown. The public event on PEI was poorly and briefly advertised, and hidden in the basement of a hotel far from the coastal communities that will face the greatest risks from petroleum development.

1) The report on the Public Consultations in this SEA is very difficult to evaluate and in our opinion, grossly understates the obvious lack of social acceptance by those of us who live near and rely upon the Gulf of St. Lawrence. It makes light of our deep concerns for our sustainable environment, livelihoods, culture, property values and quality of life.

2) The SEA understates and does not adequately address the short and long term risk factors of offshore development and exploratory drilling at Old Harry, in western NL and throughout the Gulf. These shortfalls stem from the narrow terms of reference and cookie cutter approach of this assessment, e.g., the SEA only addresses the limited scientific knowledge we have about the waters within the man-made boundaries of the NL portion of our Gulf.

3) The SEA disregards the long and short term, cumulative negative impacts of chronic exploitation and degradation that this development would bring to the coastlines and waters of western NL and throughout our Gulf.

4) **It does not address the inability to 'mitigate' an oil spill in a Nor'easter under winter ice (or any time of year), in a semi-enclosed sea with five provincial coastlines, chronic strong winds and tides, and counter-clockwise currents that only flush into the Atlantic once a year. The counter-clockwise currents could carry pollutants to the coasts of every province in Atlantic Canada over the course of a year.**

5) The SEA does not address the inevitability of increasingly erratic, severe weather patterns, hurricanes and ocean storms due to the acceleration of climate change, nor does it explain how to clean up any spill that could occur during such a storm.

6) The SEA does not offer a solution to the lack of preparedness to respond to an oil spill by Canada's Coast Guard, the CNLOPB and the offshore oil and gas industry - (Canada's offshore oil spill response outdated, audits found http://cbc.sh/qTBpiXe)

7) It does not deal with the issue of liability and compensation to stakeholders negatively impacted by an oil spill ─ people whose livelihoods could be destroyed. For instance, herring fishermen in Alaska near where the Exxon Valdez spill happened have not seen the herring come back 22 years later.

8) The other fatal weakness of this assessment is that it does not acknowledge or address ocean acidification and hypoxia in the Gulf of St. Lawrence, or deal with how fragile the Gulf's productivity and health are at this point in time.

According to DFO's *State of the Oceans* reports (2010 and 2012), in the Gulf of St. Lawrence:

"Recent and historical data reveal that hypoxia is progressively worsening in the deep waters of the Gulf of St. Lawrence, especially at the heads of the Laurentian, Anticosti and Esquiman channels. The lowest levels of dissolved oxygen were recorded in the Laurentian Channel, where measurements have routinely been in the range of 20% saturation since the mid-1980s."

What is Hypoxia?

"Around the world, marine hypoxia — a shortage of dissolved oxygen — is a growing problem that can have dramatic impacts on marine life and ecosystems. A decline in oxygen in seawater is now recognized as one of the likely consequences of global warming, because warmer water does not hold as much oxygen..."

According to DFO's *Impacts of Emerging Climate Issues*:

"Low oxygen (hypoxia) has dramatic impacts on aquatic ecosystems, and the tolerance of marine fish and invertebrates to this condition is highly species dependent. At oxygen levels below 30 percent saturation, cod and other species that are intolerant of hypoxia either migrate to other geographic regions or die. Deoxygenation is now recognized as one of the likely consequences of climate change. The long term observations analyzed by DFO scientists have provided insight into climate change over the decades and the growing knowledge and awareness of hypoxia (dead zones) in Canadian waters".

We conclude that hypoxia has reduced the resilience of the Gulf and its inhabitants, compromising the ability of the ecosystem to cope with further degradation such as seismic blasting, chronic pollution from offshore rigs, and related marine traffic.

What is Ocean Acidification?

According to DFO's *Impacts of Emerging Climate Issues*:

"The earth's oceans are vast carbon sinks. In the 200 years since the industrial revolution began, the oceans have absorbed about 30% of the carbon dioxide (CO_2) released by the burning of fossil fuels. But this climatic benefit has come at a cost. Carbon dioxide dissolves in the surface water and forms carbonic acid, lowering the pH of ocean waters. The more CO_2 the ocean absorbs, the more acidic they will become. **There are serious concerns about the ability of marine ecosystems to adapt to acidification.** Organisms that form calcium carbonate skeletons and shells, such as coccolithophores and pteropods (food source for salmon), will be greatly limited in their ability to form their outer protective shells since a decline in pH decreases the saturation state of $CaCO_3$. **Commercial species such as lobster and shellfish are also vulnerable to this impact**."

According to DFO's *State of the Oceans* report:

"Ocean acidification is a global threat with potential impacts on marine food webs, ecosystem productivity, commercial fisheries and global food security. This threat has prompted the international scientific community, including Fisheries and Oceans Canada, to investigate the implications of this significant international governance issue.

Each year, about one third of the carbon dioxide (CO_2) in fossil fuel emissions dissolves in ocean surface waters, forming carbonic acid and increasing ocean acidity. Over the next century or so, acidification will be intensified near the surface where much of the marine life that humans depend upon live.

The ocean surface is becoming more acidic with increasing atmospheric CO_2, and acidity has increased by about 30% since the beginning of the industrial revolution. Estimates of future carbon dioxide levels, based on "business as usual" CO_2 emission scenarios, indicate that by the end of this century, the surface waters of the ocean could be nearly 150% more acidic, resulting in a pH (a measure of acidity) that the oceans haven't experienced for more than 20-million years and raising serious concerns about the ability of marine organisms to adapt. This scenario is based on information provided by the U.S. National Oceanic and Atmospheric Administration (NOAA).

Monitoring ocean acidification and assessing its potential impacts are essential to the development of an ecosystem approach to managing the marine resources that are likely to be affected by this global threat."

While ocean acidity levels are increasing by 30% globally, DFO estimates that ocean acidity levels have increased by 50 – 90% in the Gulf of St. Lawrence. There is scant knowledge about how reduced oxygen and increasing acidity interact with increased loading of

petroleum products and other persistent organic pollutants. Additionally, ultraviolet light, which enhances the toxicity of pollutants in the marine environment, has increased owing to the depletion of atmospheric ozone in recent decades, and it is clear that the Gulf requires protection from any further assault. Rather, its vulnerability calls for immediate restorative action.

Conclusions:

The SOSS Coalition notes that this environmental assessment is important because it will provide the framework to determine whether offshore development should proceed in Canada's ecologically sensitive Gulf, whose beauty and bounty annually supports multi-billion dollar fishery and tourism industries across five provinces.

We believe the CNLOPB has not met its responsibility as an 'independent regulator' because the assessment does not conform with the Ecosystem and Precautionary mandates of the UN Convention on Biodiversity, and Canada's Oceans Act. The narrow terms of reference fail to recognize the vulnerable state of the Gulf of St. Lawrence and also, ignore the reality that offshore drilling will negatively impact areas beyond the constantly moving waters of the designated offshore leases in western NL.

We maintain that the concerns voiced by the people of the Gulf deserve a fair, impartial hearing. The BP Deepwater Horizon, an exploratory well that went horribly wrong, shows that serious long-term impacts do occur, especially during exploration. Three and a half years after the BP disaster, with billions of dollars spent, only 3% of the oil has been recovered from the Gulf of Mexico and shrimp are now surfacing deformed, with no eyes. We also know that herring fishermen in Alaska near the Exxon Valdez spill site have still not seen the herring come back, 22 years later. We have to prevent disasters like these from happening here.

We are extremely concerned that the federal government is dismantling environmental regulations governing petroleum development instead of strengthening them, and we are left at the mercy of unelected provincial petroleum boards. These boards have conflicting mandates for petroleum industry development, worker safety and environmental health. In our coalition's opinion, the structure of these Boards enables the focus to be more on development, backed up by industry consultants who focus on 'mitigation' of negative impacts, instead of protecting vulnerable and poorly understood ecosystems from development.

Three years after the Wells inquiry, the CNLOPB still has not implemented Justice Wells' recommendation that a separate regulator for safety and the environment be established, in spite of subsequent safety incidents on NL rigs. The Board's unwillingness to take this particular recommendation seriously makes it difficult for us to trust in this process or to feel that the CNLOPB is functioning as a neutral regulator to protect the long term public interest.

We can't help but question the neutrality and judgement of the CNLOPB when it has hired the global giant, AMEC to conduct this SEA. AMEC is one of the world's leading engineering, project management and consultancy companies whose clients include BP and Shell. According to the company's website, "Our shares are traded on the London stock exchange where the company is included in the FTSE 100 Index and listed in the Oil Equipment and Services Sector. We offer services which extend from environmental and front end engineering design before the start of a project to decommissioning at the end of an asset's life."

Therefore, Save Our Seas and Shores Coalition and the Gulf NS Herring Federation want to state on the public record that:

The SEA Update Report of Western NL 2013 is not an accurate assessment of the designated area. While it acknowledges the diversity of marine life and thus, the sensitivity of these waters, it understates the paucity of scientific understanding of the ecosystem, the gaps in knowledge and data, and the lack of social sanction for exploration in the Gulf.

Further, it does not prioritize or even place in context the ecological fragility of the Gulf of St. Lawrence due to ocean acidification and hypoxia; and it diminishes the socio-economic and cultural importance of the renewable fishing and tourism livelihoods, people, animals, recreation, coastal communities, and vulnerable ecosystems throughout the Gulf of St. Lawrence that could be negatively impacted by offshore oil and gas development at Old Harry and in western NL.

In our opinion, this type of cookie cutter SEA, conducted by only one of the five affected jurisdictions and without substantive public engagement, is not only inadequate, it is unethical. It minimizes the dangerous, and perhaps irrevocable, negative impacts that offshore oil and gas development could have on vulnerable marine life and on the tens of thousands of fishing and tourism jobs, in hundreds of coastal communities in the Gulf of St. Lawrence.

In the fragile waters of the Gulf of St. Lawrence, marine species spawn, nurse and migrate year around. Given the sensitivity of the Gulf, and given that the Gulf's historic stakeholders (inshore fishermen, coastal landowners, small business/tourism operators and First Nations among others) have survived for centuries on this globally significant ecosystem, we submit that it is unreasonable and unethical to proceed with offshore oil and gas development.

We wish to remind the CNLOPB and the governments of Canada and the five Atlantic provinces that if the offshore oil and gas industry is sincere about 'co-existence', it must concede that some bodies of water are too sensitive for offshore oil and gas development ─ including the Gulf of Saint Lawrence, which is a semi-enclosed sea that has already suffered significant degradation. How safe are larvae, spawn and all the sensitive life stages of marine organisms, if all of the waters that marine species breed in are up for grabs by the offshore oil and gas industry? We are convinced that our Gulf needs to be protected by a moratorium on petroleum exploration, coupled with efforts to conserve and restore the ecosystem.

We wish to remind you that even with moratoria in the Gulf of St Lawrence and Georges Bank, the offshore oil industry would still have access to over 88% of Canada's East coast waters.

We are recommending that the CNLOPB refrain from any and all development in the waters along the western coast of NL and in the Gulf of St. Lawrence and work inter-provincially and with the federal government to develop a Gulf-wide, arms-length and truly independent Environmental Review Panel process that will allow for effective and respectful public consultation. The scope of such a process must be open to public debate, and the process must conform to the highest international standards for strategic environmental assessment in sensitive and globally significant ecosystems.

Respectfully submitted,

Mary Gorman Save Our Sea and Shores Coalition [redacted]
Greg Egilsson Chairman, Gulf NS Herring Federation [redacted]
Dr. Irenμ Novaczek, [redacted]

Cc: The Hon. Joe Oliver MP / Minister of Natural Resources
The Hon. Leona Aglukkaq MP / Minister of Environment
The Hon. Gail Shea MP / Minister of Fisheries
The Hon. Peter MacKay MP / Minister of Justice
The Hon. Thomas Mulcair MP / Leader of the Official Opposition
Justin Trudeau MP / Leader of the Liberal Party of Canada
Elizabeth May MP / Leader of the Green Party of Canada
Wayne Easter MP
Lawrence MacAulay MP
Rodger Cuzner MP
Sean Casey MP
Kathy Dunderdale, Premier of Newfoundland and Labrador
Darryl Dexter, Premier of NS
Robert Ghiz, Premier of PEI
Pauline Marois, Premier of Quebec
David Alward, Premier of New Brunswick
Charlie Parker, NS Minister of Energy
Clarrie Mackinnon MLA Pictou East