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Port au Port Bay Fishery Committee Submission to the Newfoundland and Labrador Hydraulic Fracturing Review Panel

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Who we are, objectives

The Port au Port Fishery Committee was formed in November 2013 at a public meeting in the Community of West Bay attended by fishers and other residents of the Port au Port and Bay St. George area concerned about the collapse of the Scallop Fishery in Port au Port Bay. Scallop Fishers reported that they have never experienced such a widespread collapse of the scallop fishery in the local Bay, which has been a significant portion of their livelihood. Fishery Committee member Captain Gus Hynes said that he and his crew "were concerned that developments have been occurring around Port au Port Bay without due regard to their impact on scallops and other marine species."

Local fishermen believe that environmental pollutants may be contributing to the drastic decline in scallops. The scallop fishery collapsed in Port au Port Bay in 2013 and there is no sign of recovery. However in the nearby larger Bay St. George there appears to be a healthy scallop population which is commercially harvested. The fishermen reported that they have never experienced such a widespread collapse of the scallop fishery in the local bay.

The Western Star regional newspaper accurately reported in its March 11th, 2014 edition:

"As a longtime fish harvester out of his home community of Fox Island River, Wallace Leroy has strong concerns about what's happening in Port au Port Bay."



Clappers, which are basically empty shells, are among more than a hundred scallops pulled up during dragging late last fall by Gus Hynes of Fox Island River.

His biggest concern is the collapse of the scallop fishery in the bay, and he said there needs to be something done to find out why stocks have died off when they haven't in nearby St. George's Bay.

As a member of the Port au Port Bay Fishery Committee, Leroy said the group is trying to find out if it's a change in the water temperature, a change in the pH level in the water or something related to the oil drilling on Shoal Point in recent years.

This past season he didn't get enough scallops for a feed, he said, despite dragging a number of times. The majority of what his crew brought up were what's known as clappers — basically empty shells with no little or no meat inside.

Leroy said there are nine or 10 fish harvesters who operate out of Fox Island River, in addition to a number of others around Port au Port Bay, and there's a big concern that whatever happened to the scallops could eventually happen to crab and lobsters."

The Fishery Committee also met on Monday Evening, February 3, 2014 in Port au Port East and created an action plan to deal with their concerns. Highlights of the plan include :

1. Determine why the scallops are dying in Port au Port Bay.
2. Study and monitor the marine ecology of Port au Port Bay
3. Promote a healthy marine ecosystem
4. Preserve the species that are dying off

5. Preserve the fishery as a way of life.

The Committee has asked Provincial and Federal Fisheries and Environment Government Agencies and the Memorial University Harris Centre for assistance in mobilizing resources to do research and help develop action plans to address three of the committee's primary concerns:

The Collapse of the Scallop Fishery in Port au Port Bay

The Committee wants to find the cause for this collapse and determine possible remediation. Potential factors to be investigated that may be related to the scallop collapse include seismic testing; climate change - warmer water temperatures, carbon dioxide absorption and acidification of ocean; pollution from human waste, industrial sites; and pathogens.

Pollution Risks to the Health of the Port au Port Bay Marine Ecosystem

Research is needed to identify, quantify, determine degrees of risk and remediate sources of pollution in the Port au Port Bay area. The Fishery Committee is aware at least thirteen and possibly more abandoned oil drilling sites on Shoal Point. Some of these sites were once on land but due to coastal erosion are now located offshore in coastal waters and are leaking oily substances into the surrounding bay. Also there are other abandoned dump and oil tank sites around the coastal area that are reported to be leaking toxic substances on coastal land and into the bay.

Climate Change Impacts on the Marine and Coastal Ecosystem of Port au Port Bay

Coastal erosion, tidal surges and extreme weather associated with climate change are increasing in frequency and intensity in the Port au Port Bay Area. There has been some relatively recent research done focusing on climate change impacts on communities in the Port au Port region (Norm R. Catto, Memorial University, Department of Geography). Additional more site specific research is needed on vulnerable geographic locations in the Port au Port Bay area such as Shoal Point and the coast from Port au Port East to Fox Island River where significant, rapid coastal erosion is happening. More site specific information and baseline data is required pertaining to the rate and extent of coastal erosion that has occurred and can be anticipated to occur in these sites. Remedial strategies also need to be researched.

Note: Only the MUN Harris has responded to our request with assistance in attempting to mobilize appropriate research as per the following recent brief on their website:

<http://www.mun.ca/harriscentre/annualreport/portauport.php>

Where: PORT AU PORT

Who: Team of interdisciplinary researchers

What: Harris Centre Brokered Project

For the residents and the fisherman of the Port au Port region the sudden collapse of the local scallop fishery was not just a puzzle to be solved but a serious threat to their livelihoods. And it wasn't just scallops but sea urchin and rock crab populations that were plummeting as well.

The fishermen believe that environmental pollutants, possibly from oil or industrial developments in the area, may be an important factor in these declines. "We feel that developments have been happening around the Port au Port Bay without due regard for the possible effects on the marine environment," said Bob Diamond, Port au Port Fishery Committee Member. "Past environmental assessments haven't taken into consideration the potential high risk and vulnerability of the site to tidal surges, coastal erosion, and other impacts from extreme weather that could be related to climate change." To make things worse, high rates of coastal erosion moved what were once on-shore abandoned drilling sites offshore, potentially adding to the pollution of the nearby coastal environment.

The committee needed answers so they turned to Memorial as a partner. With help from the Harris Centre's knowledge broker Amy Tucker, local fisherman met with an interdisciplinary team of researchers eager to explore the scallop collapse. Bob Diamond explains that the committee was very much aware that this needed to be a collaborative project. "We wanted to put resources together in a collective manner to address the issues with our marine environment, and we feel that working with the university to complete thorough research would help us achieve our goals," said Mr. Diamond.

Dr. Penny Morrill from the Department of Earth Sciences at the Faculty of Science and her team obtained funding through the Harris Centre's Applied Research Fund and today they are continuing to work with the communities in the region on solving the mystery of the scallop fishery collapse and helping residents clean up and preserve the environment upon which their livelihoods depend.

While the Fishery Committee is very appreciative of the support from the Harris Centre, this research to date is very limited with the only onsite active research being one day in the fall of 2014 when one student with the assistance of local Fishery Committee Bill O'Gorman gathered water and sediment samples. Despite numerous requests no support or assistance has been forthcoming from provincial or federal government departments or agencies.

Some research is being done on climate change related to coastal erosion and tidal surge impacts on communities in the Port au Port Bay area (Norm R. Catto, Memorial University, Department of Geography). A request from the Fishery Committee has resulted in coastal erosion monitor being located outside of a community at a Shoal Point site.

Additional research is needed regarding other vulnerable locations where significant, rapid coastal erosion is occurring around Port au Port Bay including Shoal Point and the coast from Port au Port East to Fox Island River. More site specific information and baseline data is required pertaining to the rate and extent of coastal erosion that has occurred and can be anticipated to occur in these areas. Remedial strategies also need to be researched and developed.

Issues Regarding Regulatory Oversight and Responsibility Related to Oil Exploration and Development, and Hydraulic Fracturing

(a) Abandoned Drilling Sites at Shoal Point and other Sources of Pollution - Site Remediation

The Port au Port Bay Fishery Committee has reported the leaking of oily substance from derelict abandoned drilling sites in the Shoal Point Area (in order of sequence) to the Provincial Department of the Environment, Environment Canada, Fisheries and Oceans Canada and the Canadian Coast Guard. Beginning with the Provincial Department of the Environment we formally requested that they investigate the matter and were later told by a local representative that it was not their responsibility but rather a Federal Environment matter. Subsequently we were informed that it was not the Federal Department of the Environment responsibility and that we needed to contact Fisheries and Oceans Canada and then later we were told to contact the Coast Guard - which we did over a year ago and have not received a response.

On April 21, 2014 we wrote the then Provincial Minister of Environment and Conservation, Joan Shea, stating that we were aware that a recent Parliamentary Budget Office's (PBO's) 41- Federal Contaminated Sites Report released April 10, 2014, stated that in 2013 the Federal Government set aside nearly \$4.9 billion for national remediation work. The PBO report, however, suggests that the Federal Government didn't consider the full scope of the undertaking, nor the discovery of additional contaminants at some of the more than 10,000 contaminated sites in Canada's online inventory. More than half of the sites are polluted by petroleum

products where oil has spilled, or where batteries containing PCBs and other chemicals have leached into the soil.

We also stated in the letter to Minister Shea that we were aware of at least thirteen and possibly more abandoned oil drilling sites on Shoal Point. Several of these sites were once on land but due to coastal erosion are now located offshore in coastal waters and some are leaking oily substances into the surrounding bay. We asked if according to protocol our Provincial government was going to identify and recommend that the abandoned oil drilling sites in the Shoal Point area of the Port au Port Peninsula be included in the National Inventory of Contaminated Sites requiring remediation? Again no response addressing our request.



Abandoned Drilling sites at Shoal Point with Oily Sheen





Abandoned Drilling sites at Shoal Point at low tide

Larry Hicks a Provincial Department of Resources geologist has indicated that there may be as many as fifteen abandoned drilling sites in the Shoal Point area which are in various states of deterioration

There are also other abandoned dump and oil tank sites around the coastal area of the bay that are reported to be leaking toxic substances and should be investigated and if necessary remediated.

(b) Environmental Assessments - Community Engagement

Concern regarding hydraulic fracturing in the Bay St. George and Port au Port area first arose due to a request in 2010 from Shoal Point Energy to the Canada - Newfoundland and Labrador Offshore Petroleum Board (C -NLOPB) to amend a 2007 Environmental Assessment to allow Hydraulic Fracturing (Fracking) at Shoal Point on the Port au Port Peninsula. Fracking possibly would have been approved at this site if it were not for the intervention of a regional Fracking Awareness Group and other concerned citizens.

There were no public consultation meetings or forums conducted as part of the original 2007 Environmental Assessment Process which approved the last conventional drilling project at Shoal Point. The Fishery Committee believes that this environmental process facilitated by the Canada Newfoundland Offshore Petroleum Board (C -NLOPB) was invalid, undemocratic and failed the residents of the region.

The 2007 Environmental Assessment for the Port au Port Bay Exploration Drilling Program at Shoal Point makes no mention of the potential high risk and

vulnerability of the site to tidal surges, coastal erosion and other impacts from extreme weather related to climate change. The risks associated with rapid rate of coastal erosion caused by extreme weather and a tidal surges in the area are self evident such as recent wash- outs of the Piccadilly Main Road; Fox Island Road and the main roadway to the Shoal Point drilling site.

(c) C-NLOPB

The C-NLOPB is in a conflict of interest by being responsible for facilitating oil and gas development and also responsible for worker safety and environmental protection.. The Fishery Committee supports Judge Robert Wells main recommendation in his Report on Offshore Safety, that the Federal and Provincial Governments should create a Safety and Environmental Protection Agency separate from the C-NLOPB. The Port au Port Bay Fishery Committee is concerned about the independence and objectivity of the Board.

We have asked that the Government of Newfoundland and Labrador actively request the Government of Canada to establish a separate independent regulatory agency for worker safety and environmental protection as recommended by Judge Robert Wells in his Offshore Safety Report, Recommendation 29. Judge Wells considered *Recommendation 29* to be his most important in recommending the establishment of a separate independent safety regulatory agency that would encompass prevention of injury, prevention of loss of life, and protection of the environment.

Fishery Committee members believe that past government environmental assessments under the jurisdiction of the Canada Newfoundland Offshore Petroleum Board do not adequately represent or protect fishery interests and the marine environment.

(d) Climate Change

Climate Change is the greatest threat facing our world today and we are almost out of time to stop it. Observed impacts of climate change have already affected agriculture, human health, ecosystems on land and in the oceans, water supplies, and many peoples' livelihoods.

Sea level rise, combined with coastal storms associated with climate change, has increased the risk of erosion, storm surge damage, and flooding for coastal

communities, especially along the Atlantic seaboard including Newfoundland and Labrador. Coastal infrastructure, including roads, energy infrastructure, airports and port facilities, are increasingly at risk from extreme weather, sea level rise and damaging storm surges.

Climate change is expected to increase the rate of erosion in a number of ways. Increased storm activity associated with climate change also means increased pounding wave action along the coast and further erosion. Rising sea level exposes new areas of coast to wave action. Climate change is impacting the development of sea ice along the coast. Sea ice and ice foot developments serve to protect coastlines from wave erosion and a decline in sea ice increases the vulnerability of the coast.

The Intergovernmental Panel on Climate Change (IPCC) issued a May 2014 report saying the effects of climate change are already occurring on all continents and across the oceans. The world, in many cases, is ill-prepared for risks from a changing climate. The report also concludes that there are opportunities to respond to such risks, though the risks will be difficult to manage with high levels of warming. The Intergovernmental Panel in its report also stated that humankind has the technology to prevent climate catastrophe.

Wallace Leroy, fisherman and Fishery Committee member, says that it is evident to him "that coastal erosion, tidal surges and extreme weather associated with climate change are increasing in frequency and intensity in the Port au Port Bay Area." Mr. Leroy is particularly alarmed at the rate of coastal erosion threatening the main road and fishery infrastructure in the Fox Island River area.

Another concern is that the latest oil exploration at Shoal Point has taken place at the end of the point, which has experienced flooding for many years. Storms have caused seas to come in over the land and at one point even swept a fishing shed into a pond located next to the drill site.

Due to extreme weather, rising sea levels, and increasing storm surges there is significant erosion occurring in coastal areas around Port au Port Bay. Hurricane-force winds were rarely ever seen in Newfoundland, but this is changing. There is increasing evidence of major erosion taking place on Shoal Point. Could this possibly spell disaster if oil exploration were to continue in this sensitive area?

Many area residents, tourists and summer residents, such as Bill Duffenais and Karen Smith, who have a cabin and shed threatened by coastal erosion at Shoal Point, are noticing a significant increase in the rate of erosion occurring in the area.



Pictures of Bill Duffenais and Karen Smith property, Shoal Point,



"The alarming fact is that the drilling was approved on an exposed shoal at the tip of a point jutting-out some eight kilometres towards centre of Port au Port Bay." says Bill O'Gorman, scallop diver and Fishery Committee spokesperson. Bill says "the name of the area "Shoal" Point should have set off enough bells and red lights to warrant at least some reference in the 2007 Environmental Assessment to the risk involved with drilling at such a vulnerable site." Mr. O' Gorman believes that the environmental and health risks of oil drilling on a shoal are more serious today due to increasing extreme weather, rising ocean levels and tidal surges - all related to climate change



Shoal Point Jutting out into the Centre of Port au Port Bay





Tip of Shoal Point - Site for Shoal Point Energy's Proposed Fracking Project

Boswarlos resident, Andrew Harvey, a fisherman for thirty-seven years, has been recording storms and other weather conditions in the Port au Port Bay area. He has noticed the increasing frequency of storms and the intensity of the storm surges. Andrew speculates, based on the rate of coastal erosion he has observed at Shoal Point, that the latest drill site at the end of the point will be " pretty well washed away within the next five to ten years.

A provincial government website regarding climate change policy indicates that "there are areas in this province (e.g. coastline between Stephenville and the Port au Port Peninsula)where erosion has been observed. In vulnerable areas erosion and the potential impact of climate change should be included as a consideration in development planning. This should definitely be the case for any development plans for Shoal Point

http://www.env.gov.nl.ca/env/climate_change/coastal_zone_erosion/index.html

With Reference to the Provincial Government's *Turn Back The Tide Climate Change Initiative* the Fishery Committee is calling upon the Provincial Government to initiate a study and assessment of climate change impacts on Shoal Point and other sensitive areas such as the coast near Fox Island River.

The Government of Newfoundland and Labrador should also commit to bold efforts to avert catastrophic climate change by: Supporting new national and international agreements to set binding targets for emissions . Support the development and use of alternative forms of renewable energy production such as wind, solar, tidal, geo-thermal and move our economy away from reliance on carbon fuels. Realigning provincial government priorities starting with the creation of a Provincial Ministry of Climate Change with a mandate and resources to keep our air, land, and water clean and ensure quality of life for today and for future generations.

(e) Seismic and Drilling Activity

An international study published October 5, 2013 from the Scottish Oceans Institute at the University of St Andrews, Scotland, the University of La Laguna, Canary Islands and the University of Auckland, New Zealand, found that marine invertebrates, such as shellfish, suffered significant body malformations after being exposed to noise.

Team leader, Dr Aguilar de Soto, from the University of St Andrews and the University of La Laguna said:

“Nobody knew that noise exposure could affect the growth of animals so dramatically so it was a real surprise to discover malformations in these microscopic larvae. What is actually going wrong inside the cells is still a mystery that we need to investigate. Shellfish larvae go through radical body changes as they grow and noise seems to disrupt this natural process.

“Fishermen worldwide complain about reductions in captures follow seismic surveys used for oil explorations. Our results suggest that noise could be one factor explaining delayed effects on stocks”

Fisherman Andrew Harvey of Boswarlos noticed a major drop in the lobster catch in Port au Port Bay during the 2009-2010 season when drilling was happening at Shoal Point. Fishermen such as Gus Hynes question if seismic testing which also occurred in the bay is connected to the collapse of the scallop population?

Conclusion

Based on the experiences documented above how can our Fishery Committee and our neighbours and friends - the general public have any confidence in the ability and commitment of the provincial and federal government to provide responsible regulatory oversight to oil exploration and development using high risk hydraulic fracturing technology when they have not provided responsible oversight for conventional lower risk drilling which has already occurred in our region.

The Fishery Committee is requesting that the Hydraulic Fracturing Review Panel should say no to Hydraulic Fracturing due to well documented unacceptable risks and recommend that government impose a ban or indefinite moratorium on its use within their jurisdiction.

As an alternative to non renewable fossil fuel resource development government should support more of what they are promoting in the provincial government's *Turn Back The Tide Campaign* - act on climate change by developing new clean renewable energy - wind, tidal, thermal and solar.

The specific panel fracking public consultation locations on Hydraulic Fracturing are scheduled only for Corner Brook and Stephenville and are thus framed as if fracking is only a public issue limited to the Newfoundland west coast. The health, safety and environmental impacts of fracking are not only local but are also provincial, national and global. The fracked oil and the chemical waste will be transported outside the drilling sites through and to other areas of our province and elsewhere. Any legitimate, democratic community public consultations regarding hydraulic fracturing should not be limited to just Stephenville and Corner Brook and should be at least provincial in scope.

The Fishery Committee is also concerned about the lack of panel expertise related to marine ecology, oceans and climate change and we are extremely disappointed to see that ocean and marine ecosystems is not a topic for consideration listed in the review panel terms of reference.

Concluding, the Port au Port Bay Fishery Committee requests that the Hydraulic Fracturing Review Panel and our Provincial Government represent our health, safety and environment interests by supporting the banning of fracking, or by the imposition of an indefinite moratorium on its use.

Submitted on behalf of the Port au Port Bay Fishery Committee by:

B.O’Gorman

G. Hynes

W. Leroy