

## Comments on The Proposed Cacouna Energie Liquid Natural Gas Plant at Gros Cacouna, Quebec

“Magtogoek - The Great River” a short animated film by Frederic Back summarizes much of the popular feelings that the majority of Canadians have for the St. Lawrence River. It is a beautifully crafted animated film illustrating the history of one of the world's great rivers. In my judgment, we have failed as a society and a civilization to save more than just a few nuggets of what originally made this river so special. If the LNG facility is installed at Gros Cacouna, in my lifetime I will have to explain to my two young children why they cannot enjoy some of the spectacular wildlife and wild places found there that I was fortunate enough to enjoy. This would be a sad legacy to leave to anyone's children. Everyone involved in this development proposal must view this film to be sure they are aware of what is at stake in this calamitous LNG development proposal. Life in the Bas St. Laurent region of Quebec will never be the same.

I have spent time in each year of my life in the village of Cacouna, which as we all know, has been named one of the most beautiful villages in Quebec (I think Cacouna is more beautiful than Harrington Harbour!). I was fortunate enough to be a part of a family that had built a house for summer use during the resort period, 1867, and this same house is still in my family, 139 years later! My great-great grandfather built the house that is still used 6 generations later. The beauty and uniqueness of the site and the surrounding area has made for strong bonds to this house and this region and allowed this property to stay in our family through world wars, deaths and family dislocations, political upheavals, and the initial construction of the port of Gros Cacouna in the 1960s and 1970s. There is still an extremely strong family tie to this very special place.

When not spending summers or parts of summers at Cacouna, I have lived in Montreal, Nova Scotia, British Columbia, Missouri, New York, worked in nearly every province in Canada and over a dozen states in the US, and traveled extensively around the world, but I always find time each year to come back to the most beautiful village in Quebec. I have lived and worked extensively along the North Shore of the St. Lawrence River and have visited many of the cities, towns, and regions that have been forever altered by mega-projects (Sept-Iles, Baie Comeau, the Bersimis River, etc...) and have seen the results of the social, cultural, economic and environmental disruptions these developments have caused. Yes, in some ways lives were improved, but in many others, the disruptions could be questioned as to whether they are actually better or worse over the long run. In terms of environmental impacts, there is little doubt that permanent negative effects have resulted in each of these cases. This type of impact should not be imposed upon Cacouna.

I hate the developed world's addiction to fossil fuels. There are so many reasons for this, which I will not delve into here! Unfortunately, the people in power in much of the world (the captains of industry and politicians) cannot see beyond the end of fossil fuels and do not have enough will to move the world in an energy direction that would be costly at first, but sustainable and much less environmentally costly in the long run. This force is going to have to be reckoned with as an energy hungry North America tries to find a new way to satisfy its rapidly expanding demand for energy. In the late 1970's and 1980's, governments in both the US and Canada promoted natural gas as the clean burning and plentiful alternative to coal and oil as a way to heat homes, generate

electricity and power industry. Now that natural gas has been oversold, the demand for natural gas has expanded nearly beyond North America's capacity to supply itself. Now politicians and fossil fuel businesses across the continent want us to commit to foreign energy dependence again (replacing oil by natural gas, transported over long distances in a liquefied form). This type of development will financially enrich a small cross-section of Canadian society who will continue to lobby government to carry on this folly of an energy policy, leaving the rest of us and future generations to deal with the mess and a further degraded environment. This development will only set us further behind in our responsibilities to the rest of the world in the global warming arena. Canada and the US are at the top of the list for per capita energy use and green house gas emitters in the world. When will we stop behaving like ostriches and remove our heads out of the sand?

Further, by the Gros Cacouna facility being sited so closely to the American energy market, poses more problems for this proposed development. The United States will have a need for natural gas that will far exceed that of Canada's in the near future, and they will be willing to pay far more than we will for this resource. In the Northeastern US, it is predicted that the demand for natural gas will soon outpace the supply. At this time, most of the gas consumed in this American region comes from Western Canada. Where will these natural gas customers get their natural gas from then? Under the North American Free Trade Agreement, it appears that Canada will have to supply the United States with energy if it needs it. This energy market integration was clearly demonstrated after the fall of 2005 hurricane season when not only did the price of petroleum products rise to record levels in the USA, but in Canada as well! The Northeastern United States are closely watching how the Gros Cacouna and the Levis/Rabaska LNG developments unfold, because if they do not, this American region will have to look within its borders to find a site to develop its own. In the past two years, there was a very serious battle for a site in Maine, where the forces against the LNG installation were victorious and the developers were forced to look elsewhere (Quebec and the Maritime Provinces!).

I believe that we have only a single two-part option if we want to save special places like Gros Cacouna:

- 1) Make huge steps to promote energy conservation (through common sense, education, and the promotion of modern boilers, furnaces, lighting, and insulation, etc... each of which will have a greater impact on the economy than will fossil fuel development); and
- 2) Tap into severely under utilized alternative forms of energy (biofuels, solar, wind, geothermal, and the myriad of other rapidly developing technologies).

If we do not step forward as a civilization to take these initiatives, Gros Cacouna will be the first of many sites developed for this new form of energy distribution. A massive education program needs to be instituted to demonstrate how energy affects our every day lives and how our world is changing for the worse due to our over consumption of energy! In my family's home, we have taken simple but very effective measures to conserve energy (such as installing compact fluorescent light bulbs, turning down the

thermostat, and replacing leaky windows) and then added solar panels for producing for both hot water and electricity production. We now use less than half the energy to light and heat our home than we did when we moved here in 2000. We are an example that reducing energy demand IS possible! We must draw the line in the sand in Cacouna and say no to liquefied natural gas and begin our transformation to a sustainable energy future.

I believe there will be three major impacts that will result from the LNG facility at Gros Cacouna: 1) marine mammals and migratory birds; 2) the cumulative effects of this development on the entire St. Lawrence River system; and 3) the loss of public accessibility to a very special place.

### **1) Impacts of the Proposed LNG Facility on Marine Mammals and Migratory Birds:**

In my opinion, the impacts of the proposed LNG terminal will definitely have negative impacts on the marine mammals that frequent the waters adjacent to, and the migratory birds that use both the terrestrial and marine habitats found on and near Gros Cacouna. A multi-year heavy construction project with all its accompanying noise, dirt, dust and disruptions to an extended area around the construction site and the resulting final product, a 350m pier jutting out into the waters north and west of the island of Cacouna with frequent LNG tankers, pilot, and tug boat traffic, and the site where LNG will be converted into gas cannot possibly be constructed and operated without negative environmental effects on the most vulnerable species of wildlife found nearby (certain marine mammals and migratory birds). The information gathered here was easily found on the web.

The species of marine mammal that will suffer the greatest impact will be the relict population of beluga whales that inhabit the area of the St. Lawrence River in the area of the Saguenay River. This species is most common in the Arctic, where some impressively large populations can still be found. But the population found in the St. Lawrence was cut off from those in the Arctic after several ice ages and does not associate with them any more. Once the St. Lawrence population disappears, there is no chance for it to ever be replaced. The other marine mammals that regularly use the area (Minke whales, fin whales, harbour porpoises, gray seals, and harbour seals) will be displaced, but their fate is less serious than that of the belugas as they are migratory and can move to other areas, if there is not too much competition for resources there. The population of St. Lawrence belugas do not have the option to move to another location, as where they are now found has certain irreplaceable habitat characteristics making it the last area in the St. Lawrence they can survive.

The Saguenay Fjord Marine Park was established to provide an area of protection where impacts to the well being of belugas would be minimized. In the later half of the twentieth century, much of the belugas home range in the St. Lawrence River was lost when the Outardes and Manicouagan rivers were dammed for hydroelectric development. This alteration of habitat accompanied by the government sanctioned culling of the beluga population until as recently as 1979, and finally the extensive build-up of toxic wastes in the food chain of the St. Lawrence River (from sources as far away as the

upstream industrial and urban areas of the Great Lakes) has knocked the numbers down to the low hundreds. The development of the LNG facility at Gros Cacouna would be a further fragmentation of the belugas habitat in the St. Lawrence River. Any marine mammalogist could tell you that the area protected in the Saguenay Fjord Marine Park is just enough habitat to protect this population of belugas. The impact of this mega-project on this population of long-lived marine mammals will not be evident in the short term, and possibly not even in the medium term. The impacts of this proposed development will only be known many years down the road, and by that time, it will probably be too late to mitigate or remediate the situation and the beluga whales (like the right whales, bowhead whales, and walrus before them) will disappear from the St. Lawrence River forever.

There are three species of migratory birds that nest in the immediate vicinity of Gros Cacouna that are susceptible to displacement if the LNG facility is constructed: the peregrine falcon (*Falco peregrinus*), the yellow rail (*Coturnicops noveboracensis*), and the Nelson's sharp-tailed sparrow (*Ammodramus nelsoni*). Each of these three species either have a restricted nesting range based on a specific habitat need and/or are recovering from near extirpation in North America and/or have a very small global population.

Peregrine falcons are one of the most dynamic and spectacular birds in the world, catching their prey on the fly at speeds of up to 300 kilometres per hour. The pair of peregrine falcons that nests on the cliff at Gros Cacouna are of the *anatum* subspecies, which nearly went extinct across its extensive nesting range spanning across most of North America. By the 1970s, the *anatum* subspecies suffered eggshell thinning from the use of DDT as an agricultural pest control. An extremely costly and time consuming program to reintroduce the *anatum* subspecies to its historical range over the last 30 years has resulted in up to 500 nesting pairs today. This pair of peregrine falcons did not chose to nest here by chance, the resources available consist of the combination of the following locally high-quality, but limited resources: cliffs (that provide a safe nesting site) and food (nearby nesting seabirds, and migrating ducks and shorebirds). Both of these habitat needs combined with the overall small population size of a top predator are the major threats that these birds now face in a post-DDT North America. If the Gros Cacouna peregrine falcons are displaced due to LNG construction and operations, it would be a significant loss to this population.

In contrast to the peregrines, the yellow rail is possibly the shyest and most unobtrusive bird in North America. It runs through the grassy vegetation in its nesting habitat to escape potential predators rather than fly away, thus making it very difficult to see. In all of my years of looking for this bird I have only been lucky enough to see it once. In all of its global nesting range (exclusively in North America), it is rarely heard and even less likely to be seen. This is a nesting species in Quebec and fulfills its limited nesting habitat only in wetlands along the James Bay and St. Lawrence River coasts. They require marshes that are dominated by sedges, true grasses and rushes with little or no standing water where the ground stays saturated with water throughout the nesting season. Recent studies show that the total population may be as few as 5,000 individual yellow rails, with a couple of hundred in the St. Lawrence Valley. No matter what the size of the Gros Cacouna population, the displacement of this shy and secretive bird by a LNG terminal would be a severe loss to this species.

The Nelson's sharp-tailed sparrow is another unobtrusive species of bird that is difficult to hear and see. It chooses to remain low on the ground and in the vegetation and behave more like a mouse, except when the males sing during breeding season. Like the yellow rail, the Nelson's sharp-tailed sparrow is only found in North America. In Quebec, it nests in the same areas as do yellow rails: the James Bay and St. Lawrence River coasts. These populations are further distinguished by being of two different subspecies, the *subvirgatus* is found in the St. Lawrence Valley. In the entire St. Lawrence Valley, there may be as few as 1,000 individuals distributed in 20 different sites in the region. Increasingly uncommon, the Nelson's sharp-tailed sparrow requires habitat in the upper reaches of salt marshes and in brackish marshes. If the proposed LNG facility is indeed installed at Gros Cacouna, the resulting displacement of this species will be another irreplaceable loss for the region.

The population status of each of the three migratory bird species discussed here is troubled. Each of the three species is protected by the Migratory Bird Convention Act of 1917, which protects the birds and their nesting attempts from disturbance. It would be a sad sign if a \$700 million development project would be allowed to break these rules, when if a member of the public disturbed one of these species (or any bird protected under this legislation) they could be fined. The peregrine falcon is also listed as "threatened" (Schedule 1) under both the Species at Risk Act (SARA) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The yellow rail is listed as "a species of special concern" (Schedule 1) under both SARA and COSEWIC. The Nelson's sharp-tailed sparrow is likely to be designated as "threatened" or "vulnerable" in Quebec, due to its limited population and range, as noted above.

Wildlife viewing in the general area of Gros Cacouna is a special thing. I have had the opportunity to visit this site and really get to know it over the last 25 years and it is a place that keeps me coming back for more. I have seen about 150 different species of birds in the area of Gros Cacouna, and would like to continue to add to this tally. I have traveled extensively to view wildlife in North America and on other continents, but few sites have inspired me as much as this one does. During the spring, it is the rush of waterfowl that moves through the area, some remaining to nest and the others continuing on their journey to the far north. In the late-spring and early-summer, it is the breeding season that is in full swing, with a wide variety of singing birds, many of which are very accessible to the average wildlife enthusiast (including the yellow rail and Nelson's sharp-tailed sparrow). In the later part of the summer up until the first snow flies, it is the movement of birds on their way south that is so moving, with fallouts of migrating songbirds, shorebirds rushing about to feed in the intertidal zones, and then if one looks offshore from the top of the mountain on Gros Cacouna, one can spot seabirds amongst the belugas, minke and fin whales and seals feeding in the undisturbed waters offshore. I have experienced all of these things from here and wish that this opportunity could be provided for more people to do the same in the future, including my children and future grandchildren when they come to spend their vacations at our summer house in Cacouna.

The disruption that will be caused by the construction of the proposed LNG plant will cause the displacement of these three bird species. As with the beluga whales, displacement will mean a reduction in the overall population and a loss of biological diversity for the region and the province of Quebec as a whole.

## **2) Cumulative Effects on the Environment of the LNG Facility:**

As industrial development slowly but surely creeps down the St. Lawrence River valley and reaches the Cacouna area on the South Shore, the cumulative environmental effects are not evident, but become so when one examines the patterns of development more closely. To get an understanding of how cumulative environmental effects can play out, look at the North Shore of the St. Lawrence River where industrial development has for many years. The results are as follows: Aluminum smelters in the Saguenay River region, Baie Comeau, and Sept-Iles, where some of the most polluted sediments in the St. Lawrence River are found at the outfalls from these aluminum producers; Hydro development has totally altered entire watersheds, such as the Bersimis, Outardes, and Manicouagan. The development of Gros Cacouna for LNG in such close proximity to the Saguenay Fjord Marine Park will have an effect on the relict population of beluga whales in the St. Lawrence River.

The entire Gros Cacouna area was destroyed by a political boondoggle that intended to develop a 4-season deep-water port back in the 1960s and 1970s. It took 40 years for the environment to begin to recover from this major habitat disturbance. Now with this latest intended change, what will the area look like in 10 years? How will it recover? These are questions that cannot be answered at this time and the continued industrialization of the St. Lawrence River will proceed with the resulting loss of biodiversity to us all. To illustrate the cumulative effects on the St. Lawrence River ecosystem, one only has to read "Sea of Slaughter" by Farley Mowat. In this book, the slow removal of wildlife species found in the area occurred over several hundred years. As the extirpation of species proceeded, few people noticed the changes. Then we poisoned the waters of the St. Lawrence River, leaving the long-lived residents (namely belugas) with so many toxins in their bodies that they are classified as toxic sites when they die and wash ashore. Looking back now, it is easy to see how the entire ecosystem has been completely altered by the removal of several wildlife species. At the same time, if we had only one mega-project in the entire St. Lawrence watershed, it would probably be inconsequential, but if one adds all the effects of all of the developments, it becomes a large disturbance. The Gros Cacouna LNG facility will add yet another layer of disturbance to the St. Lawrence River system, impoverishing it yet again.

## **3) Loss of Public Accessibility to a Very Special Place:**

Accessibility to natural sites in the Bas St. Laurent region are becoming fewer and fewer. Over the past 20 years public access has been lost to several unique natural areas in the greater Cacouna area (Ile aux Lievre, Ile Blanche, Ile Rouge, les Iles Pelerins, les Iles de Brandypots, Ile aux Basques, and the Bic region) without paying fees to enter, if that will even allow entry. This has resulted in the removal of easy access and opportunity for local people to become familiar with the open spaces in their immediate vicinity. Many of these islands are now privately owned, protected and maintained. This is good for the wildlife, but has done little to further instill the feeling of a sense of place to those who live in Cacouna year round. To want to protect a place, people need to be able to get to know it and be given the chance to love it!

It may also be argued that public access has been lost to these islands for the sake of conservation and protection of these special wild places and the migratory birds that nest there, which is good in the long run. The same cannot be said for the hiking trail up onto "La Montagne" of Gros Cacouna, or for the other hiking trails and nature viewing sites found there. This has become a site that is symbolic to me of the extreme beauty, the diversity of habitats and the accessibility to the special places found in the immediate area of Cacouna. When one hikes up to the top of Gros Cacouna, to take in the view of several hundred square miles of spectacular maritime scenery, it is without a doubt one of the most spectacular to be found in eastern North America! If one is lucky enough to be up there early in the spring, thousands of snow geese may be staging in the fields below. In the nesting season the view is made even more spectacular by the songs of numerous migratory birds, such as the fox sparrow and the hermit thrush. Later in the season, it is the opportunity to see beluga whales or other marine mammals that frequent the waters offshore.

To deny the public this last easily accessed and inexpensive refuge of wild, wide-open space would be a real loss to the local community and the region as a whole. The only opportunity to encounter the wetland species described here is to drive the Riviere des Vases road further east near Ile Verte and walk the nearby national wildlife refuge found there, the only remaining publicly accessible area to view wildlife within an easy driving distance of Cacouna. That area is spectacular and beautiful, but lacks the views that are part of the Gros Cacouna experience. We must conserve this view in an unspoiled state in perpetuity. Even if eventually the public were granted the right to access this viewpoint after the LNG facility was completed, it would be severely scarred, and may not be worth the climb. The loss of access to the area that is now managed for bird watching along the south and eastern side of Gros Cacouna is also unacceptable. This site has become known as one of the best for viewing waterfowl, shorebirds, and migratory raptors in the entire province of Quebec. Bird watchers (myself included) travel from far away to get the chance to view some of the many species of migratory birds that can be found there from late-March to November. With an industrial site that will be transporting and processing such an explosive substance, it is very unlikely that access will be granted to bird watchers, hikers or sightseers, especially with the threat of terrorism so pervasive today.

If the Petro Canada/Transcanada consortium is so interested in helping the people of Cacouna become an even more livable village, instead of spending \$700 million on the LNG installation, why don't they use some of their corporate grandeur to donate \$1 million to the village to spend on restoring some of the habitats of the Gros Cacouna area that still have not recovered from the upheavals caused by the attempts to build the deep water port in the 1960s and 1970s. They could also install a community-gathering place, such as improving the fishing accessibility at the port of Gros Cacouna as it now stands, making it more comfortable and accessible. An education campaign could also be initiated to teach people how they can conserve energy and invest in renewable energy generating techniques so that installations like that proposed for Gros Cacouna would not be allowed to destroy our natural heritage, which has been so important in shaping who we all are. By following a plan such as this, the development proponents would gain a whole lot more credibility on the local, national and international scene for having done

good for the environment and for the future of energy generation and consumption than they ever will by developing the LNG facility.

It is obvious by now that I am not a supporter of the proposed LNG facility at Gros Cacouna. It would be a grave mistake to destroy the habitats of the most vulnerable wildlife in the region, add to the impacts of development of what already exists in the St. Lawrence River region and to restrict access to and most probably destroy a unique and beautiful wild place. An energy future not based on fossil fuels is desperately needed, and why can't this new energy future make its first baby steps in Cacouna? For the reasons stated in my document and many more that I have not outlined here, I believe our common energy future and our ability to move forward in the post-industrial age as a planet depend on ordinary people taking a stand and saying "enough is enough" and then living by these new informed choices to make a better world.

Peter W. Jones  
Vermont USA