

TOP 10 REASONS

To Oppose Kwispaa LNG in Barkley Sound

- 1. FRACKING** – Contrary to popular slogans, **LNG IS NOT CLEAN**; it does not naturally occur – i.e. it is naturally a gas (methane), not a liquid. The relatively easy, conventional extraction of oil and gas by simply drilling into reservoirs has come to an end. Seventy to ninety percent of all oil and gas wells in BC now use an extreme extraction method called hydraulic fracturing, or fracking. This is a kind of deep drilling and fracturing of the earth that is so violent it has led to significant earthquakes (over 4 on the Richter scale) in Northern BC.

Fracking uses tonnes of freshwater and toxic chemicals resulting in an inheritance of poisonous waste water ponds, polluted ground water, and unstable, leaking wells - even after they are 'capped'. Of particular concern is the legacy of leaking methane, a "super pollutant" greenhouse gas that is 85 times more potent (i.e. traps more heat) than CO₂ with regard to the global warming phenomena and [climate disruption](#).

Fracking also releases many toxic air pollutants. For proximate populations, the [health burden due to fracking is apparent](#) in the higher rates of disease and hospitalizations (asthma, other respiratory, heart, cancer, skin, nerve, bladder, pre-term births, and babies born with congenital heart disease).

For a balanced view of fracking from the fracking fields in Dene territory watch "Fractured Land". Check out this [trailer](#).

Fracking is hugely destructive to biological life-support systems.

- 2. LOCAL VALUES AND PLANNING COMPLETELY IGNORED** – Steelhead's LNG project is planned for Sarita Bay where a mega-industrial container port is also being planned. These projects go against all previous planning protocols agreed upon for Barkley Sound including the [Barkley Sound Planning Strategy \(BSPS\)](#): and the [Vancouver Island Land Use Plan \(VILUP\)](#):

The [VILUP \(p.72\)](#) clearly states that, within the Barkley Sound Special Management Zone, "particular emphasis should be on maintenance of marine/coastal recreation opportunities, as well as marine/coastal habitats: resource management should be guided by the BSPS."

“While all estuaries require special attention, the Somas and Sarita estuary received the highest possible resource value rating.” (BSPS p. 16)

“Future development of port and industrial uses should concentrate on the Port Alberni area.” (BSPS p. 44)

- 3. IRRESPONSIBLE, GLOBAL IMPACT** – Steelhead’s Kwispaa LNG project in Sarita Bay may (if it is to use BC Hydro grid power, though that is unlikely) require the entire energy output of the Site C dam and will be *BC’s biggest source of GHG emissions*. As citizens we are being told to prepare for a sea-level rise of 2-6’ by 2100. At the same time, we’re being told to fall into line for big oil ‘business-as-usual’. Meanwhile, the Intergovernmental Panel on Climate Change (IPCC) has just issued a plea for policymakers, [calling for](#) drastic reductions in CO2 emissions that would require “rapid and far-reaching” transitions in land, energy, industry, buildings, transport, and cities. “The next few years are probably the most important in our history.” (IPCC Co-Chair)

Choosing to force a \$20 billion investment in Kwispaa is choosing to bind our coastal people to an unnecessary, imported, unsustainable program of fracking the last of our gas reserves, piping the raw gas in a 1000 km swath across our province to the iconic shores of Barkley Sound for industrial processing and shipping to be burned in China. This is choosing to add 11 million tonnes of GHGs every year from project-related upstream and direct emissions.

The proponents wishful desire for better air in China doesn’t cut the fact that, if you consider the full life-cycle of LNG, it is actually worse than coal over a twenty-year timeframe. [See David Hughes report](#) on this subject.

For a privileged nation that should be showing leadership in this time of global crisis, Steelhead’s blinkered, big oil drive is a demoralizing prospect and an clear Governmental disregard of IPCC recommendations.

*Barkley Sound is rich with more viable options
for nurturing life and making a living.*

- 4. POLLUTION AND ECOSYSTEM DAMAGE** – LNG terminals come with a nasty suite of adverse environmental effects including flaring stacks (Kwispaa LNG will have five stacks that each will be 400+ feet high), air pollution, water contamination, noise

pollution, light pollution (day and night), and possible invasive species pollution from the ships' ballast water.

LNG piping, liquefaction, storage, and shipping traffic in Barkley Sound will damage delicate ecosystems including the Sarita Estuary and its eelgrass 'nursery' beds, entire food chains, and marine environments for countless species including birds, whales, seals, fish including salmon, shell fish etc.

Kwispaa will put human life and health at risk in a myriad of ways.

For a summary of Kwispaa LNG's potential environmental damage check out Table 5-8 of Kwispaa's [Project Description](#) .

We cannot choose to trade environmental integrity for money and still have the true meaning of [Seven Generations](#) at heart.

5. DANGER - Ships have been known to crash, sink, and go aground and LNG plants have been known to blow up (e.g. [Plymouth, Washington 2014](#), [Skikda, Algeria in 2004](#)). The risks inherent in pipelines, terminals, and tankers are compounded by others such as terrorism, fire, earthquake, tsunami, human error and, in this case, negotiating through the "The [Graveyard of the Pacific](#)." See this excellent short video, "[Communities at Risk, Hazards of LNG](#)":

LNG Tanker Hazard Zones for Barkley Sound have been determined using directives from SIGTTO (Society of International Gas Tanker and Terminal Operators). Following is a sobering translation of those zones by [Eoin Finn](#):

Zone 1	"The <i>Human Popsicle Zone</i> "	500m (.3 miles) to either side of the tanker
Zone 2	"The <i>Human Kabob Zone</i> "	1600m (1 mile) to either side of the tanker
Zone 3	"The <u>Heavy Sun Burn Zone</u> "	3500m (2.2 miles) from the LNG tanker (50% chance of survival)

Most of Bamfield is within the Human Kabob Zone

6. JOBS MYTH – Kwispaa LNG will have a big footprint, be visually oppressive, and curtail the free movement of local marine traffic. There is no doubt that Steelhead LNG's plans for Sarita Bay would damage local livelihoods based on, for example, fishing, tourism, and marine research. The 200-400 jobs promised for Kwispaa LNG

come with a huge cost and will not even last through one working lifetime. “LNG is not a job-making industry, it never has been, and never will be. You’re spending billions of dollars to build very complex machinery that then only requires about 100 to 200 people to run. [When we have to spend billions and billions of dollars just to employ 300 people, that’s a terrible job creation plan.](#)” (Andrew Nikiforuk)

During initial construction and every 4 years after that there will be disruptive maintenance ‘man-camps’ with thousands of workers, creating an untenable load on taxpayers and on infrastructure such as roads, water, sewer, garbage and on those dealing with crime, addiction, emergencies, disease, and medical services.

The renewable energy and building retrofits sector can contribute to climate change solutions while generating three to five times the number of jobs per dollar invested compared to the risky, climate-damaging natural gas industry.

- 7. PROPONENT** – Far from the small, homegrown, BC firm that Steelhead claims to be, it is part of an international LNG lobby operating under an umbrella of common ownership. Steelhead utilizes managers and executives currently or previously employed in the service of other fossil-fuel projects including LNG Canada, Seven Generations Energy, Woodfibre LNG, and Steelhead Natural Gas Pipelines Ltd.

Azimuth Capital of Calgary is the majority equity holder for this project. Steelhead, with very little equity, is not in a position to determine future ownership or management arrangements. Its main role is securing a foothold for LNG in our area and selling that for profit. The final majority funders, with little stake in this place other than as an outpost for resource export, will control decisions that will affect our community for generations. None of them are BC-based, or BC-owned, companies.

- 8. WARNING FROM SAKHALIN** – In early 2011, the current CEO of Steelhead, Nigel Kuzemko, was appointed by Russia’s Gazprom as their global director of LNG development. One of his priorities was the development of the Sakhalin Energy II Project in Russia, on the southern tip of Sakhalin Island in Aniva Bay. Aniva Bay, like Sarita Bay, had a salmon bearing river, a productive eel grass estuary and a beautiful, sparsely populated and shoreline. Mr. Kuzemko would be well aware of the many problems and broken promises that came to plague Sakhalin citizens.

These issues are well documented and should serve as a warning to anyone considering an LNG plant near them.

In early 2016, a delegation of Russian scientists with specific knowledge on dredging, light, and noise pollution visited BC to personally describe the negative impacts of the Sakhalin LNG project. see articles [here](#) and [here](#).

The construction of the plant damaged spawning rivers and many marine populations including scallops, crabs, and sea cucumbers. It decimated the smelt fishery. The Pink Salmon run of Aniva Bay, once the third largest in the world, collapsed after the LNG facility was built.

Other infrastructure damage was experienced in the areas water supply, garbage and sewer systems, and roads along with an overload on medical services and a serious increase in epidemics and violent crime.

Nigel Kuzemko also conceptualized the Gladstone LNG project in Australia. Fracking and gas extraction in Australia has caused an environmental catastrophe and has damaged the lives of countless Australians. To get a sense of this go to Australia's [Lock the Gate Alliance website](#).

- 9. LEGACY** – This LNG project has a useful life of only 25 years but will permanently damage the area, set a precedent for further industrialization, and leave an ugly brown site for future generations.

The social, economic, and environmental risks outweigh any benefit.

- 10. SAVING PLACE** - As Citizens of the Sound we have rights and responsibilities related to living in one of the most beautiful and vibrant natural systems left on the planet. It's ok to say no to plans with questionable benefit for the future of Barkley Sound and its inhabitants.

It's ok to love the place you live in.

SAY NO TO LNG

www.barkleysoundalliance.com

KWISPAA'S OWN WARNING OF POTENTIAL ENVIRONMENTAL DAMAGE:

Following is a summary of potential environmental damage due to Kwispa taken from Table 5-8 of Kwispa's [Project Description](#)

Marine Vegetation and Invertebrates including Species at Risk – their distribution, abundance and health are at risk due to negative impacts to water quality, sediment quality and dynamics (turbidity), currents, light pollution, light-blocking from floating structures, accidental discharges, and introduction of exotic species.

Fish Habitat and Marine Fish including Species at Risk – are at risk of PERMANENT DESTRUCTION due to similar reasons as above with the additional threat from underwater pressure waves, other noise pollution, and physical injury and death from ocean water extraction for desalinization processes.

Marine Mammals including species at risk – are at risk of damage to life and basic health, including the ability to eat and communicate, for similar reasons as above with the additional threat of physical injury and death from ship strikes.

Fish Habitat and Freshwater Fish including species at risk - are at risk of PERMANENT DESTRUCTION for similar reasons as above with the additional threat of negative impacts to freshwater quality and quantity, water eutrophication, water acidification due to air pollution (including sulphur and nitrogen), and discharges of deleterious substances

Terrestrial Vegetation, Animals including Species at Risk, and Habitat including Wetlands - are at risk due to outright removal of vegetation, proliferation of non-native and invasive species, and degradation of air, water, sediment, and soil.

Terrestrial Wildlife including Species at Risk – are at risk due to degradation and loss of habitat, threat of physical injury and death due to traffic and land-clearing, loss of vegetation, degradation of air and water quality, reduction of water quantity, noise pollution, light pollution, and habitat fragmentation due to transmission lines and project activities.

ARE YOU WILLING TO ACCEPT THESE RISKS? SAY NO TO LNG!