



Georgia Strait Alliance

Spring/Summer 2019

STRAIT TALK

Caring for Our Coastal Waters

www.GeorgiaStrait.org

Communities confronting marine threats, together

We're committed to being a strong partner for coastal communities, especially when the threats to our marine environment loom large.

Our environmental voice is rooted within communities, because it's where we live, where we hear from our friends and neighbours and where we share our ideas for a better future. By focusing on solutions, as we have since we were founded nearly 30 years ago, we're creating opportunities for all of us to work together to protect our marine environment and to keep our coastal economies strong and vibrant.

Thanks to your support, we're proud to be an effective environmental voice that stands out in the crowd, advancing solutions that are making the Georgia Strait and Salish Sea region a healthier and more vibrant place to live.

photo: Edgar Bullon



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STRAIT THOUGHTS



Amplifying the power of one

by Christianne Wilhelmson, Executive Director

During the first week of May, my husband and I had the pleasure of spending a week on the Sunshine Coast. We enjoyed the trails and visiting the local towns and of course, spending several days paddling, including time along the shores of Pender Harbour and Halfmoon Bay. It never fails to amaze and inspire me that we live in such a beautiful place and that we get the privilege to enjoy it. We were in awe of everything we saw, but in particular we were so excited that the sea stars had returned in abundance—a heartening sign of recovery after such devastation.

What wasn't so heartwarming was the presence of garbage that we saw on the waters and shores. Mostly small pieces but present wherever we went. This isn't unusual, sadly,

as it's something we see no matter where we paddle on the coast. Because of this, we've committed to bring out more garbage from our trips than we create. It's a small thing, and we don't kid ourselves that this action will see the end to the waste in our waters, but we are doing our part, and taking action is empowering.

We often hear about the 'power of one,' and also that individual actions are alone not the solution to threats as complex as climate change. I believe both are true. Actions that individuals take are not only about the impact of that action on the environment but about the impact the action has on the individual.

When we see the positive impact that our actions have in our homes or neighbourhoods or communities, we are empowered to do more. And we need everyone to do more, so that our governments and those industries which currently cause so much harm to our environment and

are the ones who must change, are pressured to do so.

We are living in troubling times, with a wave of fear and hate sweeping our country. This is no time for anyone to sit it out if they value our environment and desire to protect it and the communities we live in. During the last six months, Georgia Strait Alliance has been focussed on connecting with individuals in communities around the Strait to support local actions, and then continue to inspire individuals to engage on a national, provincial and local scale.

Whether the issue is climate accountability, spill response—small and large—or the protection of the species that make the Salish Sea home, the power for change is in the hands of each and every one of us, and I'm proud that Georgia Strait Alliance is supporting these efforts and amplifying their impact, every single day.

We are stronger together, and I'm so proud of all that we have accomplished, with each and everyone one of you playing your part

photos: Sunshine Coast kayak trip 2019, John Webber (seastars, Christianne Wilhelmson)



CLIMATE CHANGE

Two steps forward, one step back

We are in a climate emergency—and that means immediate action must be taken. Like other communities around the globe, we must begin to wean ourselves from using fossil fuels.

What happens if we don't? What we're already seeing in our oceans will only get worse, including oceans that have less oxygen for fish and other marine life to breathe, higher base sea levels, increased extreme weather and storm surges, and increased acidification making it difficult for shell bearing creatures to build their homes—and each of these has ripple effects on other areas of our natural environments that, ultimately, impact our communities.

Late last year, we welcomed the Province's new climate plan, noting that it is among the leading plans in North America. However, the positive elements of the plan were undermined by the government's heavy investment in liquified natural gas, a fossil fuel that significantly creates increases in greenhouse gas emissions in the extraction and production phases.

The Province's climate plan: CleanBC

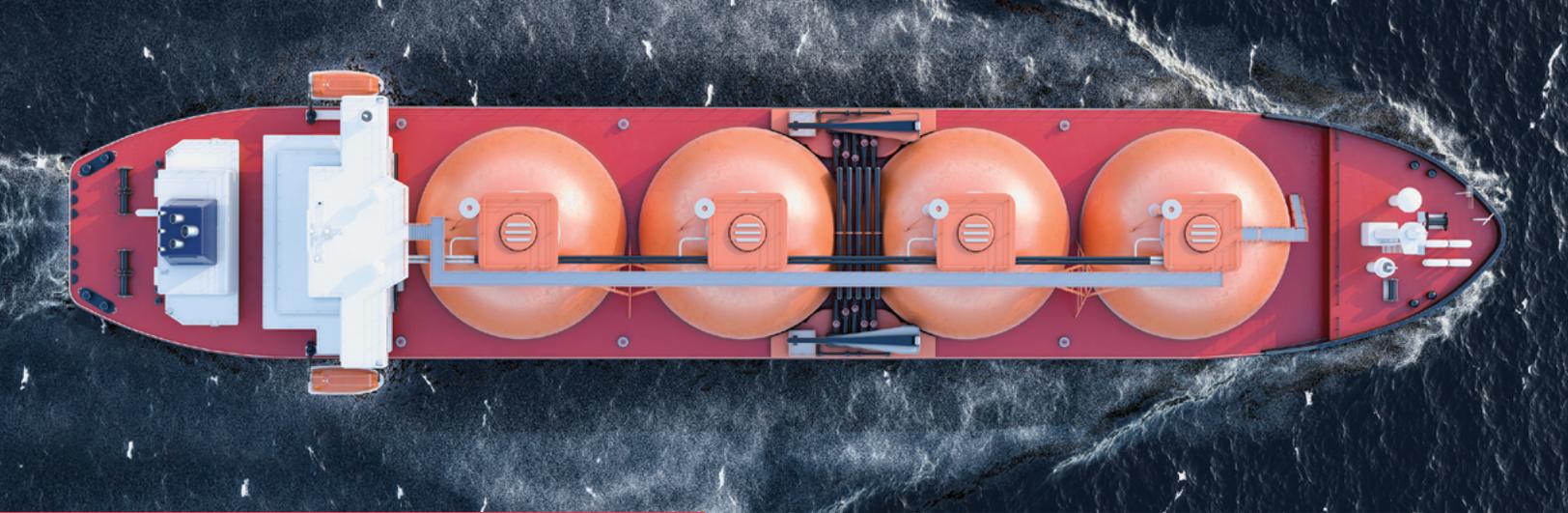
PROS

- ✓ Legislated climate accountability
- ✓ Measures to reach 75% of BC's pre-Paris Accord targets
- ✓ Incentives for cleaner vehicles and home heating
- ✓ Increased investments in transit and building retrofits
- ✓ Transition support for Indigenous and remote communities to wean from fossil fuels

CONS

- ✗ Denies the severity of the climate crisis and avoids acknowledging the transformative changes required by using pre-Paris Accord targets
- ✗ Includes a 25% policy gap that needs to be reduced in yet to be determined ways
- ✗ There is no plan going beyond 2030 to 2050

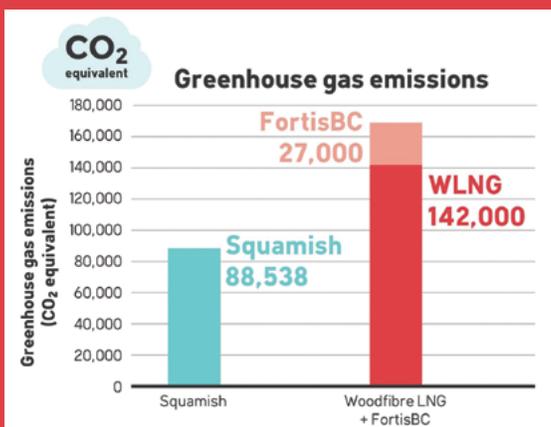
The BC government is subsidizing LNG development in the form of tax relief for major international corporations to the tune of \$5 billion dollars—or five times the amount budgeted for investment in the province's CleanBC climate plan



LNG facility in Howe Sound

The Woodfibre LNG project, which has secured federal and provincial environmental approvals, aims to build a processing and export facility a few kilometres south of Squamish. Construction, initially scheduled to begin in 2017 has been delayed to 2019, with a final investment decision yet to be made.

In order to collect and carry LNG, tankers would need to transit through critical habitat for southern resident killer whales eight times a month. The product would be shipped to other markets, while at home, the operations of the facility would nearly double the greenhouse gas emissions (GHG) of the Squamish area to 162,000 tonnes a year of CO₂ pollution.



Graph courtesy of My Sea to Sky

DID YOU KNOW?

LNG creates more greenhouse gases than coal when fracking and pipeline emissions are considered.

Negative impacts of LNG development

In northern BC, there are approved plans to develop a liquefied natural gas (LNG) terminal at the port of Kitimat. The LNG, in theory, would be shipped to Asian markets, however, the negative impacts close to home are being ignored.

FRACKING

Hydraulic fracturing, or fracking, is a common method to extract natural gas for export as LNG. It uses water and chemicals that are piped at high pressure into rock formations to crack them in order to release gas that is sucked back up those same pipes. Fracking is associated with earthquakes, fugitive methane emissions and contaminated drinking water.

METHANE

Methane is a major component in natural gas. It's one of the fugitive emissions that escapes during the extraction process and when the well head is abandoned. It's also a major contributor to greenhouse gas emissions, with a potency 25 times that of CO₂.

SHIPPING

Fracked gas is transported by road, or pipelines. It is then cooled to minus 160 degrees Celsius in order to liquefy it, condensing its volume for shipping. While LNG is not flammable in its liquid form, it moves rapidly towards atmospheric temperatures when spilled or released in its gas state, making it functionally a highly flammable substance.

The planned LNG projects in B.C. would produce 8 Mt CO₂ equivalent per year—double what gasoline cars emitted in BC in 2016

Taking Action on CLIMATE CHANGE

The climate crisis demands action. Together, we can stop the expansion of fossil fuel infrastructure in our region, demand climate accountability from those who have profited from climate chaos, and help build the climate-stabilizing economy that our oceans and whole planet need.

Climate accountability in BC

More and more city managers across the province are starting to prepare their communities for climate change. More than 20 local governments are actively fighting back against the biggest fossil fuel companies and their business model that passes climate costs, in their entirety, to communities, which means that it is taxpayers like us who are on the receiving end.

Is your municipality here?

These are communities in the Georgia Strait region asking the biggest polluters to pay their fair share:

- ✔ Alert Bay
- ✔ Courtenay
- ✔ Powell River
- ✔ Saanich
- ✔ Victoria
- ✔ West Vancouver

Not on the list?

Contact Anna to get the ball rolling
anna@georgiastrait.org

4 KEY FINDINGS

of the Intergovernmental Panel on Climate Change*

- 1 There is 95 percent certainty that human activities are responsible for global warming
- 2 Carbon dioxide is at an “unprecedented” level not seen for at least the last 800,000 years
- 3 Sea levels are set to continue to rise at a faster rate than over the past 40 years
- 4 Over the last two decades, the Greenland and Antarctic ice sheets have been melting and glaciers have receded in most parts of the world

*IPCC Assessment Report Summary for Policy Makers, released Sept. 27, 2013 - <http://www.ipcc.ch/>
Based on NASA's Global Climate Change graphic

Visit our website to find out how you can take action now!

www.georgiastrait.org/ClimateAction



There is a lot happening down at the docks!

The **Royal Vancouver Yacht Club (RVYC)** has certified its 9th and final facility at Coal Harbour, receiving a 4-anchor rating. RVYC has achieved a minimum 4-anchor rating across the board, including two top 5-anchor ratings.

Lions Gate Marina is the latest to become CMBC certified, with a strong 4-anchor rating.

West Vancouver Yacht Club's Fisherman's Cove facility has increased its rating to five anchors—the highest score—demonstrating that CMBC fosters an ethic of continual improvement.

CLEAN MARINE BC

Deepening its REACH

In its 12th year, CMBC has 30 certified boating facilities but there are none in Central Vancouver Island—from Sayward to Nanaimo. That's the reason we're collaborating with Environment and Climate Change Canada so we can bring our marina eco-certification program to the east coast of Central Vancouver Island.

What is Clean Marine BC?

This is Georgia Strait Alliance's program that encourages recreational boating facilities to reduce their impact on the marine environment by conserving energy and water, and to reduce the amount of pollutants that their operations allow to enter the surrounding waterways.

Clean Marine BC has been recognized with an EcoStar Award for our environmental achievements and leadership!

Riccardo Regosa, General Manager of Point Hope Maritime Ltd. presents the EcoStar Award to Michelle Young, Clean Marine BC Coordinator



DO YOU HAVE A RETIREMENT PLAN FOR YOUR BOAT? WE CAN HELP.

Good captains don't abandon their ship. So when your boat comes to the end of its useful life, make sure you do the responsible thing and retire it properly.

Learn how and where to dispose of your old boat at boatingbc.ca/boatdisposal.

Financial contribution from



Come Aboard!

Explore our Clean Marine BC eco-certified and enrolled facilities. Discover how to get your marina, yacht club, harbour authority or boatyard involved in our voluntary environmental recognition program.

www.georgiastrait.org/CMBCmarinas

SPECIES PROTECTION

Protection is coming for endangered orcas

The federal Minister of Fisheries and Oceans has begun to implement measures aimed at halting the decline of Southern Resident killer whales—largely in response to a lawsuit that we, along with five other conservation groups, brought against the minister last fall.

The lawsuit sought to have the federal government issue an emergency order, which is a legal tool available under the *Species At Risk Act* that allows for the government to take immediate actions to mitigate the imminent threats facing this endangered whale population.

In lieu of an emergency order, however, the federal government committed to implement comprehensive actions by this summer that will effectively support the recovery of these iconic whales. The first step was for the government to convene technical working groups on large commercial vessels, general vessels, prey, sanctuaries and contaminants.

Georgia Strait Alliance was an active stakeholder, contributing ideas and recommendations for the federal government to consider in its forthcoming recovery measures. We participated in two working groups on sanctuaries and contaminants and collaborated with our coalition partners in the other three.

We commend the government for taking these measures, the boldest yet, to reverse the decline of Southern Resident orcas. With still more work to do, our focus now shifts to implementation and enforcement, as well as to long-term measures that include how to address and cleanup pollutants to support improved whale health.

Join the Orca Action Team

to learn about how you can help
www.georgiastrait.org/OrcaActionTeam

What's being done for orcas?

Georgia Strait Alliance asked the government to:

- ✓ **Recover Chinook salmon populations** through recreational and commercial fisheries closures in areas around the Gulf Islands and the Strait of Juan de Fuca.
- ✓ **Minimize physical disturbance** by keeping vessels, including whale watchers, at least 400 metres from Southern Resident orcas in their critical habitat.
- ✓ **Reduce noise levels** by expanding the slowdown zone for ships in Haro Strait to include Boundary Pass and require large vessels to meet noise reduction targets.
- **Address marine contaminants** by expediting upgrades to the Lower Mainland's wastewater treatment facilities, with an immediate focus on the Iona plant, while examining opportunities for advanced treatment upgrades

photos: Miles Ritter



TRANS MOUNTAIN New science on wind and waves

photo: Nathan E. Stewart spill, Heiltsuk Nation

Last fall, Georgia Strait Alliance presented powerful new technical information regarding oil spill response capability to the National Energy Board (NEB) in its reconsideration of the marine shipping impacts of the proposed Trans Mountain pipeline.

Our original research focused on how wind, wave and currents impede oil recovery efforts. Specifically, we looked at containment booms—foundational pieces of equipment that are used to contain spilled oil. We found that our ‘world class’ spill response relies on equipment that is not up to the job. Booms begin to fail in even

relatively calm conditions—what would be considered a gentle breeze by most mariners.

Using boom failure criteria from the manufacturers and testing done by the US government, we counted how many days a year booms would not work for more than two hours. Oil spill response near Port Renfrew would be impossible nearly 200 days a year due to wind and wave conditions, and currents found at Race Rocks would overwhelm the best booms that spill responders have for our coast. Along some portions of the route, the operating limits for booms are

breached for days or weeks at a time, which would likely result in significant amounts of oil being left in our marine environment.

Oil spills happen in an instant. They leave a lifetime of repercussions on plant and marine life, while taking heavy tolls on human health, economies and communities.

We don’t need to put our coastal region at risk for a fossil fuel industry that can see its moment to sunset, but refuses to start its transition. It’s time for the federal government to face the future and say no to Trans Mountain.

Oil spill containment boom failures in the Salish Sea

- 1 Strait of Juan de Fuca**
 - Wind and waves will cause a 75% drop in performance for booms: **326 days of the year**
 - Response impossible: **198 days**
- 2 Race Rocks**
 - Currents will cause oil loss in standard protected water booms **70% of the year**
 - Currents will cause oil loss in highest-rated booms **20% of the year**
- 3 15 km south east of Victoria**
 - Wind and waves will cause a 75% drop in performance for booms: **232 days of the year**
 - Response impossible: **58 days**
- 4 Skipjack Island**
 - Currents will cause oil loss in standard protected water booms **60% of the year**
 - Currents will cause oil loss in highest-rated booms **9% of the year**

- Boom failure locations
- Trans Mountain tanker route
- Southern Resident Killer Whale critical habitat



Wind and wave conditions from 2017. Data for currents from 2015. Map locations are approximate.

A REAL-WORLD EXAMPLE

The sinking of the Nathan E. Stewart near Bella Bella in 2016:

27.5% Percentage of time that oil spill cleanup was suspended due to weather conditions

1.27% Percentage of oily water recovered



photo: Nathan E. Stewart spill, Heiltsuk Nation, April Benzce

Engaging directly with the Province on spill response

Georgia Strait Alliance was uniquely positioned to advocate for better rules around oil spill response times and for more community involvement in oil spill planning **because we were the only environmental organization at the Province's technical working group on spill regulations.**

Our staff participated in multi-stakeholder working groups that focused on:

- how oil spill regulations are, and should be, applied to marine spills
- the importance of geographic planning in response plans and how local knowledge can play a role
- how to improve response times to support better mitigation efforts

As part of the consultation process, we mobilized more than 2,000 of our supporters to sign on to our submission that made it clear that current oil spill regulations are far too weak to protect our coast and our communities. We continue to wait for the revised regulations to be publicly released.

What we want from the Province's revised oil spill regulations:

- ✓ Local communities are the ones with the most to lose from oil pollution and therefore must have a seat at the table when it comes to spill response planning
- ✓ The polluter must pay for the response regime but cannot be the decision maker
- ✓ Spill response must be based on the best independent science and analysis
- ✓ The spill response regime must be transparent, comprehensive and compulsory
- ✓ Shippers must show they can effectively clean up a product before they are allowed to transport it

DID YOU KNOW?

The NEB's recommendation to approve Trans Mountain relies on spill planning research done in laboratories that does not reflect the real-world conditions in the Salish Sea. It optimistically assumes that diluted bitumen floats for an extended period of time.



THIS BAR SAVES ORCAS

#ORCASCANTWAIT

Eat chocolate for a cause!

There's a new chocolate bar in town, with dark, organic, fair trade chocolate and coconut. When you buy Denman Island Chocolate's new Orca Bar, part of the proceeds support our efforts to protect Southern Resident orcas. You can find out where they are available on our website—and then buy lots and enjoy them guilt free! If your local store is not carrying the bar, ask them to!

DID YOU KNOW?

- ✓ Passages Gift Shop on BC Ferries that cross the Strait are now carrying the GSA-Denman Island Chocolate Orca Bar!
- ✓ In Vancouver, the zero-waste grocery store Nada Grocery on Broadway at Fraser is selling a truffle version!

Visit our website to learn more and to see the full list of retailers

www.georgiastrait.org/OrcaBar

SUSTAINABLE SEAFOOD & SUPPORT

We hosted our second annual fundraiser at Fanny Bay Oysters in downtown Vancouver. Guests dined on sustainable seafood and heard first-hand, from shellfish farmer and Fanny Bay Oysters owner Bill Taylor how the work that we do at GSA supports the sustainability of coastal industries and jobs. Together, we're protecting the Strait of Georgia for generations to come.



Find us on social media

@GeorgiaStraitBC

Sign up for our monthly e-newsletter

Get timely updates on important issues and actions needed to protect our waters.

www.georgiastrait.org/StayInformed



A SPLASH OF BLUE IS NEW

Vancouver’s City council quietly and unanimously has passed a motion to develop Vancouver’s first-ever watershed management plan. It signals that the city is deepening its understanding of the intricacies and co-dependencies of land and water for a city that is surrounded on three sides by water.

With the decision to adopt this plan, the City has the chance to outline how we want our watershed to be managed and how to integrate them with the many needs of our waterfront. It is a first step to lifting the shoreline from a perpetual state of vulnerability and ambiguity.

That is what communities and waterfront stakeholders have been telling us over the past five years while we’ve been facilitating discussions through our Waterfront Initiative. As we move into the next phase of our work, we’re looking forward to partnering with City staff (as Council has directed staff to work specifically with Georgia Strait Alliance) to share the knowledge and relationships that we’ve developed during our years of consulting with community organizations, analyzing and coordinating data, and working towards a shared vision for how Vancouver’s waterfront can best be managed.

**Congratulations, Vancouver:
a splash of blue looks good next to all your green!**

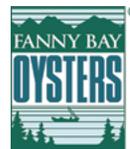
NEW TO THE TEAM

Tessa Danelesko is our new Species Protection Coordinator. She holds a BSc in biology and psychology from UVic. Tessa brings experience in project management, geographic information system (GIS) and marine conservation, having worked as a research technician and coordinator of the Vancouver Aquarium’s BC Cetacean Sightings Network. We’re thrilled to have her join our team!



Thank you to some of our recent funders and partners...

SEA ★ STAR



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada



We also acknowledge the financial support of the Province of British Columbia.

YOU MAKE IT POSSIBLE!

Georgia Strait Alliance is proud of our recent accomplishments, which are possible because of your support, and the support of businesses like Denman Island Chocolate.

“Being on an island, we’re very aware of ocean issues. On a personal level, I’m particularly keen on protecting the waters around us because it’s part of what makes this part of the world special—and we know that oceans don’t respect regional or national borders.

The idea for an orca chocolate bar came about one morning while drinking coffee with my partner, Annika. Serendipitously, that morning we also received a call from Georgia Strait Alliance. You know how some things just feel right? Well, this partnership with GSA is definitely an example of that.

We’ve decided to make this Denman Island Chocolate’s very first ongoing campaign, reflecting that the serious food and habitat issues facing orcas are not going away anytime soon. We have well over a hundred retailers carrying the Orca Bar—from independent yoga studios in the Gulf Islands to BC Ferries to distributors in Ontario. You don’t have to be able to see the Salish Sea to become engaged in an initiative like this.

People are loving this campaign and, while it’s nice that people are buying chocolate bars, my hope is that they learn that GSA is doing good marine conservation work, and they find something else they can do or that they get involved in other ways.”

~Daniel Terry, Denman Island Chocolate



Your business can make a difference too!

Contact us to find out how:
giving@georgiastrait.org

**Join
us**

Your tax deductible donation to Georgia Strait Alliance is an investment in our shared vision for our local waters, for today and years to come.

To donate today, call 250-753-3459, email gsa@GeorgiaStrait.org or visit www.georgiastrait.org/donate

Strait Talk © Georgia Strait Alliance, 2019

photo: Marnee Jill