

From: Faye Mogensen <[REDACTED]>
Sent: Saturday, January 20, 2024 2:17 PM
To: SouthInfo
Subject: South Pender Community Consultations
Attachments: Support of Bylaw 122 Letter (2).pdf

Dear Trustee Evans and Trustee Falck,

I am writing with regard to the meetings scheduled to discuss the South Pender land use bylaw.

When we moved here just over 3 years ago, I was thrilled to read the South Pender OCP goals that, in brief, are to preserve and protect the rural character and to take the impacts of climate change into consideration. I fully supported the changes to Bylaw 114 when they were made, and continue to do so. From my perspective, during the multiple community consultations that were held to discuss the changes, many compromises were made. It seems very unfortunate and a waste of time to be reopening the conversation, at least until the bylaw has been more thoroughly tested. There are many more pressing issues, not least of which is to come up with better practices for blasting permits.

Even in our short time here, we are noticing a slow but sure process of tree removal as well of shoreline erosion. We consciously decided not to purchase a different property we viewed when we learned that part of it was subject to intrusion by king tides, which are predicted to become the normal high tides in the not too distant future. With this in mind, I think it is extremely sensible to increase the ocean-front setback. Vancouver is proposing several measures to adapt to the "new normal" that is fast approaching. You can read their approach [here](#). While I have provided this link (and a letter that I describe further down), overall I feel that the onus should not be on the public, but rather on the Trustees to explain why the revised bylaw doesn't mesh with the OCP and other policy statements of the Islands Trust and, in general, why it is not a good idea.

In terms of house size, I would like to point out that the multigenerational house project that we are currently embarking upon was approved under the revised bylaw without the need for a variance. It will be home to six adults and a small number of children and we were able to design it in such a way as to comply with the 4000sq.ft. restriction imposed by the changes to the bylaw. We feel confident that it will provide plenty of space for us all, and would be happy to share our approach with anyone who is interested. This is to say that I feel that the house size restrictions are reasonable. Not only do smaller houses consume fewer resources both during the build and in maintaining them, they take up less green space - something highly and expressly valued in our OCP.

Further to this, I am attaching a letter written by Shauna Doll (a scientist working with Raincoast Conservation) and addressed to South Pender Island Local Trust Committee and Planning Staff in 2022. She provides a great deal of scientific information that supports the changes to Bylaw 114 that were implemented by the past council.

I look forward to your response.

Sincerely,
Faye Mogensen





To: South Pender Island Local Trust Committee and Planning Staff
% Islands Trust (Southern Office)
200 – 1627 Fort Street
Victoria, BC
V8R 1H8

Friday, July 22, 2022

From: Raincoast Conservation Foundation
% Shauna Doll, Gulf Islands Forest Project Coordinator
W̱SÁNEĆ Territory
P.O. Box 2429
Sidney, BC V8L 3Y3

RE: Support for Bylaw 122

To South Pender Local Trustees, Steve Wright and Cameron Thorn, Chair, Peter Luckham, and whomever else it may concern,

I am writing on behalf of Raincoast Conservation Foundation in support of proposed Bylaw No. 122.

When Great Northern Management (GNM) was contracted in the spring of 2021 to conduct a governance, management, and operations review of the Island Trust (IT), it was found that Land use planning consumes nearly 75% of the IT annual budget. Though these activities directly impact virtually every resident of the Trust Area, **“there is no comprehensive analysis of the Trust Area’s capacity to sustain current population and activity, or its ability to accommodate more growth and development, especially in light of climate change and other considerations.** These include adequacy of water supply, rising sea levels, wildfire risks, threats to ecosystems, stringent environmental protection regulations, the increasing cost of public services” (emphasis added, p. 27)¹. In the past year alone, BC has experienced [catastrophic wildfires](#), [flood-induced landslides](#), and an unprecedented heat dome that altogether [claimed the lives of nearly 600 people](#). Climate change consequences are only expected to increase in frequency and severity into the future.

In 2015, the Islands Trust Council (ITC) made [a declaration](#) stating that “all residents in the Trust Area have a *right* to live in a healthy environment.” Four years later, in 2019 the ITC [declared a climate change emergency, committing to take urgent and fair climate action](#). More recently, the [ITC declared 2022-2023 the Year of the Salish Sea](#), an initiative that calls on leaders and the public to take action to

¹ Great Northern Management Consultants. (2022). Islands Trust Governance Review. <https://islandstrust.bc.ca/document/governance-review-final-report-february-2022/>

better protect the ecosystems characteristic to the Salish Sea region. Despite these declarations, and repeated attempts by individual Local Trustees to refocus efforts on the ITC's *preserve and protect* object, little action has been taken to operationalize these intentions on the ground. According to the Intergovernmental Panel on Climate Change (IPCC), [as reported by the BBC](#), "even if all the policies to cut carbon that governments had put in place by the end of 2020 were fully implemented, the world will still warm by 3.2°C this century... [yet] some government and business leaders are saying one thing, but doing another... and the results will be catastrophic."

Regardless of each individual Trustee's interpretation of the *preserve and protect* object, science-based assessments have shown that 1) globally, the climate is warming at an unprecedented rate and 2) despite being among the most productive ecosystems in the province, Coastal Douglas-fir forests and associated habitats characteristic of the Gulf Islands are among the least protected ecosystems in BC. The latter point has been substantiated by the IT's own scientists working within the Islands Trust Conservancy, along with scientists at the University of Victoria, the University of British Columbia, the Coastal Douglas-fir Conservation Partnership, the Garry Oak Ecosystems Recovery Team, numerous other forest scientists, and conservation organizations.

Further, [according to Dr. Rachel Holt](#), ecologist and co-author of the report, [Old growth: Last stand for biodiversity](#):

"The CDF ecosystem is on the very far end of the highest risk ecosystems in BC. Not only are there no big forested ecosystems left, there is practically no old growth at all remaining in CDF ecosystems, certainly less than 1% from valley floor to hilltop. This has been exacerbated by a high proportion of private land that has been completely converted to non-forested use. What is left in the CDF is individual trees--we are down to individual members of an original population. This puts the CDF at the very top of the list in the province for being at high risk."

These ecosystems are unraveling from former levels of diversity and abundance. The Trust Area represents approximately 30% of the CDF's entire global extent, and the IT has a legal duty to safeguard the forests and associated ecosystems that remain, not only for residents of the Trust, but for the entire population of BC.

Yet, according to the [One Island, One Earth](#) study, recently conducted by the Galiano Conservancy Association (GCA), per capita emissions on Galiano Island are twice the global average (8.4 tonnes/CO₂/year)². Further, if everyone on the planet had a lifestyle similar to those living on Galiano, 4.3 earths would be needed to sustain the human population. The outcomes of this study are a strong proxy for other islands within the Trust Area. It is reasonable to assume the climate and ecological impacts of neighboring communities are similar to those of Galiano. In fact, it is likely that the GAC's findings are conservative for islands like North Pender, Salt Spring, and Gabriola, all of which currently have a higher rate of land conversion and development compared to Galiano.

² Galiano Conservancy Association. (2022). One Island, One Earth: An ecological footprint and fingerprint for Galiano Island. https://galianoconservancy.ca/wp-content/uploads/2022/06/EF_Final_Report.pdf

While land conversion is a significant driver of ecological degradation and subsequent biodiversity loss on the Gulf Islands, climate change is placing additional unprecedented pressures on food security and living conditions for both human and non-human species. According to William Rees, originator and co-developer of ecological footprint analysis, climate change is just one of many symptoms of “ecological overshoot” or the result of “human enterprise far exceeding the carrying capacity of the planet” (Reese, W., 2021)³. A drastic reduction of individual ecological footprints is needed to address climate change and the myriad other co-symptoms of overshoot.

The proposal made in Bylaw 122 to limit the footprint of new construction on South Pender Island (SPI) is an attempt to operationalize the many climate-focused declarations made by the ITC over the past decade. It aligns with the SPI Official Community Plan (OCP)⁴, which states that the community is committed to “preserve the rural nature and natural diversity of [the] island environment” (p.5), including its *undisturbed, natural* and varied landscapes.

Pender Islands Context

Intense development pressure, coupled with a large influx of investment, has meant that financial constraints are no longer barriers to land development or house construction on Pender Islands. The result is a trend toward larger house sizes, heavily modified properties, the loss of rural and natural character across the landscape, and a loss of the quality of life objectives that the SPI OCP has identified as important. This changing landscape has social, economic, aesthetic, climate, and ecological consequences that not only affect residents of Pender Islands, but the wider BC population, and visitors to this region.

Increased individual house size means increased resource use, more land disturbance, and increased impermeable groundcover. This land conversion means more stormwater runoff, increased soil compaction, disruption of local water tables, and increased habitat fragmentation. Other impacts include increased construction costs and energy consumption. Despite these impacts, homes in North America have been ballooning in size. For example, in new single-family houses constructed in the United States, living area per family member has increased 3 fold since the 1950s⁵. Similarly, according to a [2017 survey](#), the average home size in Canada has doubled since 1975. As of 2018, BC had some of the largest detached single family dwellings in the country, [according to Statistics Canada](#).

³ Raincoast Conservation Foundation. (2021, Nov 29). *Our ecological footprint with Dr. William Rees, Professor Emeritus, UBC*. [Video]. YouTube. <https://youtu.be/l73oIO8oG58>

⁴ South Pender Island Official Community Plan Bylaw No. 107. (2011), S. 2.1. <https://islandstrust.bc.ca/wp-content/uploads/2020/05/SPbylaw-no-107-ocp-consolidated-2019-05-08.pdf>

⁵ Wilson, A. & Wilson, J. (2005). Small is beautiful: U.S. House size, resource use, and the environment. *Journal of Industrial Ecology*, 9 (1), 277-283. DOI: 10.1162/1088198054084680.

Rationale for Bylaw 122

Social and Economic considerations

- Larger houses tend to:
 - Raise property values and purchase costs, making provision of accessible (i.e. affordable) housing more challenging. Building oversized, unaffordable homes contributes to the housing crisis.
 - According to the U.S. National Association of Home Builders (NAHB,) the rising [cost of building materials](#) is harming housing affordability.
 - Require more extensive trades than can be supplied by the local community putting added pressure on an already overburdened ferry system.
 - Occupy local tradespeople for longer periods of time, resulting in community members enlisting off-island services at a greater expense to themselves, with lower benefit to the wider community as off-island workers spend their time and paychecks in communities closer to their own homes.

Aesthetic objectives/Form and Character considerations

- Larger houses tend to be more imposing on the landscape, creating a greater visual impact. Buildings should be unobtrusive in terms of their impact to adjacent homes, private and public properties, and the waterfront.
 - Waterfront homes have a special obligation to meet visual shoreline objectives. This is consistent with both the IT object, and SPI's OCP, which have stated goals for protection of natural views, and the maintenance of residential privacy.
- Residential buildings should reflect the outstanding natural attributes and existing rural characteristics of South Pender Island, for both residents and visitors.
- Buildings should be constructed with consideration of the natural vegetation and topography of the land where they are situated. They should be harmonized with the scale and character of the surrounding environment.
- The Form and Character component of Bylaw 122 should address the visual presence of a building within the landscape. While not prescriptive, the purpose of including Form and Character is to guide the appearance of buildings and their relationship to the public realm and surrounding environment.

Climate and Ecological considerations

- Smaller houses generally use and require less energy and materials and have a lower ecological footprint at a site, regional, and global level.
 - The NAHB⁵ estimates the materials used in building a 2,082 ft² (193-m²) single-family house include:
 - 13,837 board-feet of framing lumber,
 - 11,550 ft² (1,073 m²) of sheathing, and

- 16.92 tons (15,350 kg) of concrete.
- NAHB director of Research states that building a 5,000 ft² house will consume three times as much material as a 2,082 ft² house, even though its square footage is only 2.4 times as large. This is because larger houses tend to have taller ceilings and more features, and thus consume proportionally more materials⁵.
- Larger homes have a bigger footprint, resulting in a greater energy (e.g. heating, cooling), electricity and water demands.
 - Recommendation five of GCA's *One Island, One Earth* report is to “reduce the overall footprint of human infrastructure”². (p. 148). This recommendation is in accordance with the British Columbia Institute of Technology's “*One Planet Scenario*” which asserts that an 85% reduction in residential developed area is needed to reduce ecological overshoot (GAC, 2022, p. 148). While this is a challenging recommendation considering the cross-Canada housing crisis, it is essential that the provision of housing does not contribute to further ecological fragmentation, carbon release, water stress, and biodiversity loss. One way this is achievable is to reduce the spatial footprint of human settlements.
- Loss of local carbon storage and carbon release.
 - Douglas-fir forests and above ground vegetation in BC can hold 60% of stored carbon and soils can hold up to 38%. Non-selective tree removal (clear cutting) can cause an immediate release of aboveground carbon, as well as up to 30% of the carbon stored in the forest floor pool⁶.
 - Up to 60% of carbon stored in the forest floor is released when machines arrive to clear and prepare a site. The greater the area disturbed, the more carbon is lost from the removed trees and the disturbed soil⁶.
 - The *One Island, One Earth* assessment found that Galiano Islands' ecosystems, and CDF ecosystems of the whole region, are 36% more productive than the average terrestrial ecosystem on the planet². Thus, the CDF biogeoclimatic zone is not only the smallest, most imperiled, and most biodiverse in BC, but also one of the most productive.
- Larger homes tend to:
 - have more vehicles, more parking areas, and more impervious surfaces, resulting in more loss of natural habitats and landscapes,
 - have bigger sewage disposal systems, requiring a greater area of soil and habitat disturbance and increased tree removal, and
 - have higher water demands.
- Smaller homes are generally easier to fit into the natural landscape requiring less disturbance and alteration to the natural landscape

⁶ Simard, S.W., Roach, W.J., Defrenne, C.E., Pickles, B.J., Snyder, E.N., Robinson, A., & Lavkulich, L.M. (2020). Harvest intensity effects on carbon stocks and biodiversity are dependent on regional climate in Douglas-fir forests of British Columbia. *Frontiers in Forests and Global Change*, 88 (3), 1-20. DOI: 10.3389/ffgc.2020.00088.

Example of implemented housing size limit bylaw

In 2013, the community of Chilmark in Martha's Vineyard [passed a bylaw](#) limiting house size to 3,500 ft² on properties less than 3 acres. Property owners aiming to build larger dwellings on properties greater than 3 acres have been required to go through the planning review board to ensure that social and environmental impacts are addressed, minimized and mitigated.

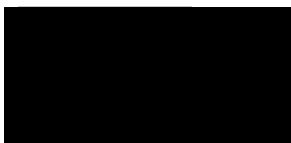
The bylaw passed by overwhelming majority after a long debate by community members, with one longtime resident of Chilmark reflecting on when his family first purchased property in the small community 50 years prior: "At the time we were woken up at dawn by a chorus of bird noises that were so seriously strong you couldn't sleep any longer," he recalled. "This is the type of thing that brought people [here]. . . if you want suburbia, what in the world are you doing here?"⁷

Closing statement

The ecological value, natural beauty, and community character of the Gulf Islands and surrounding waters has long been recognized by government and community. These very features are likely what has drawn most current residents to live within the Islands Trust Area. This is an opportunity to make good on the formal declarations and verbal promises made by the IT over the past decade by reducing the ecological footprint of SPI residents and providing an example to other Gulf Islands communities. We urge the SPI LTC and community members to lead in a positive way, considering climate change, as well as ecosystem and habitat loss, while maintaining rural character as mandated by the Trust Object. Proposed Bylaw 122 addresses a concern for a trend that is out of sync not only with the current objectives and goals of the SPI OCP, but also with the *preserve and protect* object of the IT.

"...island communities are not "islands unto themselves." They must seek connections through and across the Salish Sea waters - and beyond - to effect meaningful change" (Galiano Conservancy Association, 2022, p. 3)².

Sincerely,



Shauna Doll
Gulf Islands Forest Project Coordinator
Raincoast Conservation Foundation

⁷ Tumin, R. (2013, Apr 24). Chilmark overwhelmingly passes bylaw to limit home size. *The Vineyard Gazette*. <https://vineyardgazette.com/news/2013/04/24/chilmark-overwhelmingly-passes-bylaw-limit-home-size>

Addendum: Setbacks

As a complement to limiting floor size of private dwellings, it is recommended that 30 m setbacks be applied to the marine shoreline.

The rationale for the South Pender proposed 30-metre septic setback includes the desire to avoid contamination of nearby water bodies and domestic water supplies. The same should hold true for the marine foreshore. The marine foreshore is an area historically used by First Nations for food gathering, and these Nations are increasingly reclaiming their connections to food sources within their ancestral Territories. Marine plants and animal species also require healthy shorelines free from septic seepage. A 30-metre setback on the distance to the marine shorelines must be included.

Suggested amendment in red to Section 3.3 (4) of current [SPI Bylaw No. 114](#):

To prevent fouling of the foreshore *and impact on fish, shellfish and marine ecosystems*, an underground sewage disposal system, including all septic tanks, absorption fields and related appurtenances shall not be sited within 30 metres (98 feet) of *the natural boundary of the sea*, a watercourse, drilled well or source of domestic water supply.