Peter Johnston and Tim Peterson, Trustees, and Peter Luckham, Chair Lasqueti Island Local Trust Committee

March 21,2021

## Re: Feedback on Draft OCP

Dear Peter, Tim, and Peter,

I am writing to provide some feedback on the Draft OCP, particularly in relation to the Resource Stewardship section (3.2). I had input into the development of this section. I am also writing to provide some response to a recent, anonymous, community mailout specifically advising residents to write you with negative feedback regarding the Advocacy Policies related to invasive species in this section. I anticipate that some members of the community will use the template for responses provided in this mailout, so am responding directly to those points.

I am writing, not only as a resident of Lasqueti, but as a professional biologist with over 30 years experience doing research, teaching, and consulting about the forest ecosystems of coastal British Columbia. I am a Certified Senior Ecologist with the Ecological Society of America and have published more than 80 scientific papers, mostly about forest ecology. My opinion about conservation issues has been sought by municipal, provincial, federal and international levels of government and by industries and First Nations. I have not done research on invasive species specifically, but have taught graduate and undergraduate ecology courses which included invasive species ecology as a topic.

## Part 1: Section 3.2 Resource Stewardship.

Overall, I strongly support the text in this section as it currently stands. It is a meaningful improvement from the previous version of the OCP. It already represents a significant set of compromises made by the sub-committee which developed this text in relation to issues regarding invasive species in general and the feral sheep in particular.

## More specifically:

A. Some members of the community claim that "invasive" is a value laden term that is used inappropriately in relation to the feral sheep on the island. However, such terms have clear technical meanings and should be used in the context of those meanings -- as is done in the draft OCP. A feral population can be formally defined as a group of animals of a domestic species that is living outside the control and management of people; they are domestic animals, not "wild" animals, but are living under semi-wild circumstances. Around the world, feral populations may be, and often are, invasive. An invasive species has been defined in a policy context as a species that is not native to the ecosystem being considered and whose introduction causes or is likely to cause economic or

environmental harm or harm to human health.1"

The domestic sheep which were introduced to Lasqueti by the settler community and allowed to become feral fit this characterization. While their populations, and thus their impacts, are variable across the island, there is no doubt that overall they are associated with a variety of environmental impacts, most dramatically on understory plant species and tree regeneration, with the possibility of cascading effects on bird and insect communities<sup>2</sup>.

Some people claim they are a "heritage" breed, however, they have received no such formal designation (and such designations do exist) and the term is inappropriately applied to them. "Heritage" is a value judgement which always begs the question "whose heritage?". Feral sheep on Lasqueti are a legacy of colonial history and are valued by some members of the community. Should an arbitrary assertion by those individuals be sufficient to merit the OCP declaring them a heritage breed for the community? Nor are they even a single distinct breed since some flocks may be associated with the first settlers in the late 1880's, but these interbred with others introduced in the 20<sup>th</sup> century.

A species can be exotic, invasive, have negative impacts, and still be valued by people for some of its attributes. Lasqueti sheep are a good example: some people value them as sources of food, but this does not mean that they don't also have negative impacts on the environment or that they are not an invasive species. There are many other invasive species on the island with significant negative impacts, including bullfrogs and rats, but they tend not to generate controversy because they have no clear benefits and well understood negative impacts. Other invasive species, such as the common Japanese oyster, have so many economic benefits for humans that few people are concerned about their invasiveness.

B. Regarding Advocacy Policy 2: Scientifically rigorous surveys of invasive species, in particular feral sheep, are encouraged to estimate population size and to assess local ecological impacts (e.g. by the Lasqueti Island Nature Conservancy).

The recent mailout suggests deleting this policy. I urge you to keep it. There is a great deal of argument among members of the Lasqueti community about the population size and ecological impacts of the feral sheep. This conflict is exacerbated because the geographically variable presence and impacts of sheep on the island leads people to have different opinions based solely on their place-based experiences. The best way to address this disagreement is to have valid scientific data on the sheep population and their ecological impacts, replicated across the island. Lack of such independent data has meant that over the past 30 years (the time of my experience on Lasqueti), no meaningful progress has been made in addressing this issue: people continue to argue about this with

<sup>&</sup>lt;sup>1</sup> Beck, K.G., K. Zimmerman, J.D. Schardt, J. Stone, R.R. Lukens, S. Reichard, . Randall, A.A. Cangelosi, D. Cooper, and J.P. Thompson. 2008. Invasive Species Defined in a Policy Context: Recommendations from the Federal Invasive Species Advisory Committee. Invasive Plant Science and Management 1:414–421.

<sup>&</sup>lt;sup>2</sup> Martin, T.G., Arcese, P., Scheerder, N. 2011. Browsing down our natural heritage: Deer impacts on vegetation structure and songbird populations across an island archipelago. Biological Conservation. 144: 459-469.

- little or no basis in evidence for their opinions. Who conducts the research is less of an issue than that the research is conducted at a high, professional standard, so that the results can be accepted broadly by the community.
- C. The mailout asks why, as other invasive exotic species on the island, bullfrogs and rats are also not singled out - specifically in its comments on Advocacy Policy 4. Advocacy Policy 4 does not single out any species, either native or invasive, it merely advocates monitoring by the community of these species. Why single out bullfrogs and rats among the dozens of species that could be candidates? Furthermore, there is no need to do formal research on bullfrogs and rats (as might be represented in Advocacy Policy 2). We already understand the environmental impacts of bullfrogs very well and there is provincial policy regarding them as an invasive species -- and no one is advocating in favour of them on Lasqueti. There is no controversy regarding them: we have a strong basis for recommending a bullfrog control policy without doing further research. I'd be thrilled to have a statement in the OCP encouraging landowners to monitor and control bullfrogs on their properties, but we don't need more research in order to do so. Rats are similar to bullfrogs in this regard -- we don't need to do more research to know that they are a problem and should be controlled to the extent feasible. In contrast, there is disagreement about the sheep. We have a dearth of information because, in British Columbia, this is an issue that is almost unique to Lasqueti - it is harder it is harder to rely on research or policies developed elsewhere. Thus, while a number of species of concern should be monitored, there is a strong, logical argument for singling out sheep as a focus for formal research.
- D. Regarding Advocacy Policy 6: *Private landowners are encouraged to take stewardship actions on their land to reduce populations of undesirable invasive species and enhance native species.* 
  - The recent mailout suggests deleting this policy. I urge you to keep it. There is essentially no stewardship on crown land on Lasqueti outside of the few areas specifically set aside for conservation purposes (e.g., ecological reserves), so if meaningful environmental stewardship is to occur broadly on the island, it *must* take place on private land. "Reducing populations of undesirable invasive species and enhancing native species" is a fundamental element of biodiversity strategies at all levels of governance around the world, from municipal, to provincial, to national and international. It is part of the UN Convention on Biological Diversity<sup>3</sup>, to which Canada is a signatory.

Which species are deemed to be undesirable in this Advocacy Policy is left entirely up to the discretion of landowners. Landowners can choose species and actions which reflect their own values. We are just encouraging people to engage in stewardship and support goals locally that we are already committed to as a Province and a nation. It is hard to imagine not supporting the goal to "reduce populations of undesirable invasive species and enhance native species."

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<sup>&</sup>lt;sup>3</sup> https://www.cbd.int/doc/meetings/sbstta/sbstta-06/information/sbstta-06-inf-11-en.pdf.

- E. A couple of minor editorial suggestions:
- P 13. Objective 1. space missing in "historicand"
- "Indigenous" should be capitalized throughout
- On P 13, for Objective 2 "To ensure wild food resources are harvested sustainably", I would suggest that this be changed to "To ensure that wild food and other resources are harvested sustainably". There is no reason that only food resources should be singled out for sustainable harvest -- this should include non-food resources as well (e.g. timber and other non-timber forest products).

Beyond these specific issues of invasive species, I would like to express my support for the General Policies on P 13 and the rest of the advocacy policies on P 14.

## Part 2: Other sections of the OCP.

In section 3.3 Community Stewardship, there is a sub-heading for "Resilience". This is a great topic to include in the OCP, however the points actually included here don't really do it justice. There is a tremendous amount of work taking place in relation to planning for community resilience - especially in relation to forest fires and climate change, yet none of this is referenced and the two bullet points here seem largely unrelated to those topics. Is it too late to develop this idea further? Ideally, issues of Community Resilience should be integrated with the discussion of issues and policies in relation to climate change on Pgs 12-13.

Finally, I would like to express my general support section 3.1 on Environmental Stewardship and for the advocacy policies related to Cultural Resources on P 18.

Please don't hesitate to contact me if you wish to discuss any of this or if I may be of further assistance in this regard.

Sincerely,

Ken Lertzman, Professor Emeritus School of Resource and Environmental Management Simon Fraser University