From: David Dunnison

Sent: Saturday, January 22, 2022 6:01 PM

To: Islands2050

Subject: Opposition to New Draft Policy: Precautionary Principle and Bad Science over

Good Science

Islands 2050 Submission

The Precautionary Principle and Commitment to Science

Reference: Page 3, Part 1.3 and page 12, Part 3 of *Draft New Policy Statement Bylaw No. 183 – Updated July 15, 2021*

Please count this as a submission "opposed" to adopting the proposed Draft New Policy Statement. In this case, this opposition is due to a fundamentally flawed understanding of context.

The Precautionary Principle that the Islands Trust is proclaiming it will follow only works if those applying it, Trustees and Staff in this case, are openly amenable and committed to heeding, understanding and applying the science while encouraging and listening to other voices especially when opposing insights might not support previously held views. Anything less is simply an excuse to follow whim and pursue indefensible practice. In such cases, the Precautionary Principle is noble in statement but ignoble in application. It is too easily wielded as the stick of excuses with which to resist and beat off logical, rational, prudent and defensible action.

The track record for humanity on this is not admirable. Ask Galileo.

With scientifically indefensible plans to restrict beneficial technologies like desalination and in its support for junk science like the Island Trust's belief in supernatural carbon sequestration powers, the local track record is poor. That poor Islands Trust track record includes the need, one year later and following community outcry, to initiate an actual public engagement process on such an important topic as the Island Trust's fundamental Policy Statement.

A stark example of the Island Trust's failure on this account is its ongoing perpetuation of the myth that the Islands Trust Area forests are uniquely proficient at storing carbon. It should be obvious to anyone familiar with these islands — even by merely riding a ferry through Active Pass — that they feature extensive exposed rock and notoriously shallow soils. There are multiple volumes of books that have been written on the shallow Gulf Islands soils. [i] [ii] [iii] [iv]

Having apparently heard what they wanted to hear, the Precautionary Principle apparently allows the Islands Trust to ignore any actual science or dissenting voice. Yet, even a passing knowledge of the relatively and comparatively harsh Gulf Islands growing conditions should be sufficient to question any assertions of comparative advantage in carbon sequestration of our forests over similar forests growing under similar climate in deeper and richer soils on Vancouver Island.

This statement is not made lightly. Careful review of the data supplied to the Islands Trust confirms the opposite of what the Islands Trust has stated about comparative carbon sequestration.

The Islands Trust has claimed 43% advantage in carbon sequestration based upon a singular, effectively in-house study that has not been independently verified. [v] Rather than the advantage claimed, the numbers in the sole, unconfirmed study reveal that Islands Trust forests are at a 27% sequestration rate disadvantage. There is an arithmetic mistake and the Islands Trust analysis has not compared apples to apples; or, in this case, trees to trees. Rather, the Islands Trust is mistakenly comparing proportion of forested areas to overall land areas, rather than forest or tree quality and performance. Yes, unsurprisingly, the Islands Trust area does have proportionately more forested area than less rural areas nearby. But the numbers reveal that these Islands Trust Area forests are not as good at sequestering carbon.

Given how bizarrely remarkable the mistaken advantage is asserted to be, it is yet more remarkable that the Islands Trust has not commissioned a separate and independent confirming study nor apparently put pencil to paper to double-check the math. The mistake made, however, is revealed through easy calculation. Knowing how capable and well-educated Islands Trust staff are, surely someone on the IT Staff must have noticed or questioned such an outrageous difference. As such, one has to wonder if the organizational culture within the Islands Trust stifles any questioning of authority or application of scientific principle.

Had anyone within the Islands Trust checked the math, this glaring mistake may have been exposed. Please note that a separate submission will be provided to Islands 2050 on this topic that will methodically expose and explain the mathematical error even though the mistake is arguably as obvious as the prominent cliffs found throughout the Gulf Islands.

Yet, this absurdity is now being perpetuated and amplified through its inclusion in a primary reference for something as important, long-lasting and far-reaching as the New Draft Policy document.

The Islands Trust report^[vi] that contains this mistaken assessment is one of the first references found In the New Draft Policy document. The origin is a 2014 study conceived by, commissioned by and conducted for the Islands Trust by a grad student, apparently without more experienced oversight. Not to disparage this student as it is quite possible that they might have subsequently caught the mistake themselves. Unfortunately, even if they had, to their detriment and ours, Pandora's box had been opened and the erroneous conclusion with its mistaken math was unleashed and publicized ongoingly by the Islands Trust. This Islands Trust publicity campaign has even included writing articles for newspapers. [vii] Advocacy lobbyist groups have now also ramped up their echo chamber media campaigns on this without checking the math themselves. Science was clearly not the objective. Apparently, thanks to the Precautionary Principle, so long as we claim we care about the environment we don't have to worry about whether the numbers actually add up in order to say whatever indefensible thing we want.

That this mistaken conclusion continues to be publicized by the Islands Trust and now by advocacy lobbyists more than seven years later, without question and without confirming study, sends a strong negative message about the Island Trust's commitment to science and the fundamental organizational culture. Paying a grad student to say what some within the Islands Trust may want to hear is not seeking or heeding wisdom nor obtaining an independent opinion and does not embrace science.

It is of some consequence, and possibly some degree of irony that the now former grad student involved in this misguided carbon sequestration exercise was the co-author of a recent paper on the serious problem of wasted research resources in conservation science. One of the paper's insights is that:

[ViII]

"We define wasted research resources as ... inputs resulting in outputs that are flawed, inaccessible, or otherwise inadequate to inform policy or practice."

In other words, we should not waste money on or tolerate bad science – and we should not create rules like the Precautionary Principle to shield us from real science. On this subject, perhaps that former grad student could rely on their hands-on, real-world exposure and experience when working on this latest research.

In terms of recommendations, the Islands Trust is encouraged to consider and implement the following, including redrafting its Policy Statement as and where appropriate:

- 1. Correct the material
- 2. Encourage transparency, whistleblowing and constructive objection and put explicit focus on changing the operating culture and paradigm
- 3. Embrace independent oversight and broader public accountability
- 4. Focus on listening to and serving the community and taxpayers the paying customers of Islands Trust services and not on advancing personal agendas that seek to support narrow reinterpretations of the Object of the Trust to the detriment of the taxpayers, the community and even the environment
- 5. Do not listen solely to advocacy groups and commit to disclosing lobbyist activity, including the disclosing of lobbying by advocacy groups

Regards, David

https://conbio.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/csp2.329 12 January 2022.

[[]i] A.J. Green, L.J.P. van Vliet, and E.A. Kenney (1989). Soils of the Gulf Islands of British Columbia. Vol 1 Saltspring. Agriculture Canada.

[[]ii] Ibid. Vol 2 North Pender, South Pender, Prevost, Mayne and Saturna.

[[]iii] Ibid. Vol 3 Soils of Galiano, Valdes, Thetis, Kuper, and lesser islands.

[[]iv] Ibid. Vol 4 - Soils of Gabriola and Lesser Islands.

[[]v] Schuster, Richard (2014). Carbon and Biodiversity Mapping and Assessment for the Islands Trust Area. Islands Trust Fund. 19 p. accessed at https://islandstrust.bc.ca/wp-content/uploads/2020/11/carbonassessment.pdf.

[[]vi] Islands Trust (2019). State of the Islands Indicator Project: Final Report. pp 16-17. Accessed at:

https://islandstrust.bc.ca/wp-content/uploads/2020/05/TAS_2020-01-22_StateOfTheIsland_FinalReport-with-Survey.pdf

[[]vii] Submitted' (2014). UBC study shows forests are significant carbon sinks. Coastal Reporter.

https://www.coastreporter.net/local-news/ubc-study-shows-forests-are-significant-carbon-sinks-3378862. p 15.

[[]viii] Buxton RT, Nyboer EA, Pigeon KE, et al (2021). Avoiding wasted research resources in conservation science. Conservation Science and Practice. Accessed at: