May 22, 2024.

To: Ben Sivak, Manager Of Planned Growth Strategic Projects | Planning & Development, HRM

**cc:** HRM Sandy Lake Area Councillors Lisa Blackburn, Tim Outhit Paul Russell, Pamela Lovelace District 7 Councillor Waye Mason SLSRRP Coalition Co-Chairs Water Regan, Karen Robinson

From: David Patriquin Prof. of Biology, Dalhousie University (Retired) Resident of Peninsular Halifax

Topic: Draft LSA for Sandy Lake area.

In a separate document, I am submitting some technical comments on the Draft LSA for the Sandy Lake Study Area. My comments are restricted to aspects addressing Watercourses, Wetlands and Water Quality as I have made related field observations which are highly pertinent. I am a retired (2008) Prof of Biology at Dalhousie University; since retirement I have been active in several trail and natural history groups [1].

I am concerned that Stantec's selection of variables to assess WQ (Water Quality) lacks any reference to oxygen and the related limnological measurements I conducted on Sandy Lake 2017 to 2023 and ongoing, nor to a set of limnological observations conducted entirely independently by Dalhousie graduate student Casey Doucet in 2021.

I brought these observations to the attention of Stantec in two meetings in 2023. The oxygen data and some Total P measurements by Casey Doucet (also not cited in the Draft LSA, although they do consider Total P as a WQ variable) indicate Sandy Lake is in a precarious state now, let alone consideration of the impacts of the envisaged future development.

Perhaps Stantec intends that the oxygen and related data are to be considered as a component of the Watershed Study. Yet without the input from that study, they conclude based on the limited set of WQ data they chose to cite, that "Sandy Lake is not significantly affected by urban runoff or erosion within the watershed".

That conclusion is simply not a scientifically supportable as I elaborate in my attached comments. The Draft LSA goes on to assign minimal buffer widths to wetlands and watercourses, commenting that those are starting points but with no mention that with input from the Watershed Study they would likely be increased – they did have access to the AECOM Watershed study of 2014 which at the least illustrates that Sandy Lake *is* significantly affected by urban runoff and erosion.

As well, I point out that the Draft LSA makes several references to limitations to the study due to "multiple extreme weather events throughout the 2023 field season", but the authors do not comment on the likelihood that such extreme events are associated with climate warming and will be repeated in the future. That has important implications, in particular that increased buffer widths on wetlands and watercourses - such as those are cited in the McCallum Environmental Ltd Ecological Assessment - are likely to be required to address these new challenges.

My comments in the attached document are offered as much as is possible, from a strictly scientific perspective.

I do have some further comments, below, reflecting a more personal perspective as a long time resident of peninsular Halifax and a "nature nut".

As a rep. of the Woodens River Watershed Environmental Organization and the Halifax Field Naturalists, I was involved early on in OurHRM Alliance discussions of development in Halifax, the HGNP, need for complete communities etc. Coming out of those discussions, I became an advocate of densification in currently serviced areas as a measure to reduce sprawl off the peninsula and its negative consequences both ecologically and monetarily.

I maintain that perspective today, even as densification, potentially, could affect my own neighbourhood on peninsular Halifax. A large part of the reason I am OK with such densification – and many others are likewise - is that nearby areas such as The Backlands, Sandy Lake & Environs, Blue Mt Birch Cove Lakes, The Five Bridge Lakes Wilderness Area improve livability in the high density areas. Halifax is very special that way [2].

Back to Sandy Lake.

I hope that should a comprehensive and objective assessment of the Landscape Suitability for development and the Watershed Study indicate that a major development of the type envisaged is NOT compatible with maintaining Sandy Lake as a valued recreational and ecological resource, this will be clearly stated. I urge the powers that be to be open to such a conclusion.

Certainly the Sandy Lake lands have very high ecological value and high recreational value. Sandy Lake itself is the Crown Jewel of those lands and its health is highly dependent on continued ecological integrity of the adjacent lands and especially those in the area of most of its headwaters, i.e. precisely where a major new development is proposed.

I suggest it's pretty likely that HRM planners could identify sufficient lands of much lower ecological value within 2 km and less of the currently proposed development at Sandy Lake. *Not Developing on land of high ecological value when land of much lower ecological value is available nearby is key to addressing the Housing Crisis and the linked Biodiversity/Climate Change crises simultaneously, rather than priorizing one over the other.* 

In the case of the Sandy Lake lands, there is another massive benefit for the community that would accrue if we embraced the concept of a Sandy Lake-Sackville River Regional Park (SLSRRP) as advocated by the SLSRRP Coalition [3]: it would lie in the centre of four growth areas (Sackville to the north, Bedford to the east, Bedford West to the south and Kingswood North/Lucasville to the west) – see Figure on next page.

Such a Regional Park would provide exceptional recreational opportunities and, I suggest, would stimulate growth in the surrounding communities, as well as continue to provide multiple ecological benefits those lands currently provide. It would be a win-win for all, and especially future generations.

I appreciate your consideration of these comments

- David Patriquin

## Sandy Lake – Sackville River Regional Park Planning vision



Existing and future trails and access points to Sandy Lake – Sackville River Regional Park



Proposed boundary of Sandy Lake – Sackville River Regional Park



Primary trail system within the Park

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Secondary trail system within the Park

Secondary access point to the Park

Primary access point to the Park

The proposed trails alignment is based on site topography, on recreational and environmental values, and on preferred recreation destinations. These trails also provide opportunities for connection with trail and transportation systems external to the Park. The primary and secondary entrance points to the Park are located in places with a convenient connection to public road system.



Source: [4]

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## Notes

- 1. CV etc at <u>www.versicolor.ca/davidGpatriquin</u>
- See <u>Sharing Our Space with Wildlife in Halifax</u>, by David Patriquin for the Wildlland Writers/Nova Scotia Naturally, a column in the Chronicle Herald, 2014.<u>https://versicolor.ca/wildlandns.ca/wpcontent/uploads/2014/12/HalifaxWildlife7Nov2014.pdf</u>
- 3. See <u>https://www.sandylakecoalition.ca/;</u> and The case for Sandy Lake-Sackville River Regional Park goes to Halifax RP+10. Post on versicolor.c/sandylakebedford on May 1, 2020 <u>http://versicolor.ca/sandylakebedford/2020/05/01/the-case-for-sandy-lake-sackville-river-regional-park-goes-to-halifax-rp10/</u>
- 4. Appendix L Access points Sandy Lake Sackville River Regional Park. 2020. in SLSRRP Coalition Submission to RP+10. <u>http://versicolor.ca/sandylakebedford/wp-content/uploads/2020/05/Appendix-L-Access-points-Sandy-Lake-Sackville-River-Regional-Park-2020.pdf</u>

Separate Document (forwarded by e-mail with this letter)

## Re: HALIFAX REGIONAL MUNICIPALITY - FUTURE SERVICED COMMUNITIES DRAFT REPORT - VOLUME 2: SANDY LAKE STUDY AREA REPORT – LAND SUITABILITY ANALYSIS

## Comments on Watercourses, Wetlands and Water Quality

**by David Patriquin** (Prof of Biology, Dalhousie University, retired)

May 22, 2024