Main issues with the background studies completed by Stantec for the Sandy Lake Special Planning Area

Sandy Lake - Sackville River Regional Park Coalition

October 2025

A. Lacking from all reports

1. No study of flooding risk for lower Sackville River based on potential development at Sandy Lake. From the RFP:

"Review any existing floodplain mapping or other available flood resources to identify potential flood hazards currently existing within the watershed."

It is vital that a study be completed that examines the potential flooding risk on the lower Sackville River that is based on the proposed development scenarios within the Sandy Lake Special Planning Area. The Sackville River floods, impacting homes, businesses, infrastructure, and more in the floodplain of the Sackville River. In 2023 a flood on the lower Sackville River caused substantial damage and took one life. Rivers like the Sackville River flood more extensively when forested land in the watershed is converted to hard surfaces such as the roads and houses proposed in the Clatyon development. The Sandy Lake subwatershed is the largest subwatershed in the Sackville River watershed. How water moves through the Sandy Lake subwatershed could have a profound effect on flooding downstream. It is imperative that the potential increased flood risk to the lower Sackville River be modeled before development decisions are made.

B. Land Suitability Analysis

1. Lack of analysis of potential impacts on Sandy Lake <u>Regional Park</u> despite this requirement in the RFP. From the RFP:

"Special Considerations:

The Sandy Lake Study Area is located to the west of the Sandy Lake Regional Park. Land acquisition and planning for the park is ongoing. Maintaining the integrity of the park, including the functioning of shared environmental, recreational and cultural features, must be considered as part of this study. This includes consideration of the visual impact and compatibility of development in the vicinity of the park."

Also:

"Identify habitat, open spaces and other features that should be preserved and recommend mitigation and remedial measures to reduce the impact of potential development."

2. Lack of serious consideration or use of HRM Council's motion regarding the Sandy Lake Environmental Features Assessment (a.k.a the McCallum report) despite requirement to use this report in the RFP. From the RFP:

"The Sandy Lake Environmental Features Assessment was recently completed to identify areas of ecological significance for consideration during the park planning process. On July 12, 2022, Regional Council passed the following motion for consideration as part of this study area:

- 1. Review and use the findings of the Sandy Lake Ecological Features Assessment in the background studies being undertaken for the Sandy Lake Special Planning Area, including organizing the form and location of development to best protect:
 - a) at least the suggested widths for important corridors,
 - b) at least the suggested riparian and watercourse buffers, and
 - c) at least the identified areas of predicted old or mature forest..."
- 3. Lack of inclusion of several, relevant reports and datasets, despite the requirement to do so in the RFP. From the RFP:

"HRM provided resources include:... Any other relevant reports and studies upon request" Also:

- "Other resources include:
- Sandy Lake-Sackville River Regional Park Coalition
- Forests and Surface Waters of Sandy Lake & Environs A Natural History Perspective"

All relevant studies were sent to HRM and Stantec. Despite this, the following are key studies that were not used in support of Stantec's work:

- Dr. David Patriquin's work on Sandy Lake and Environs website
- Natural Wonders study on SAR, birds, and wildlife corridors
- Dr. Karen Beazley's contributions regarding wildlife corridors
- iNaturalist observations
- The park planning study and rationale commissioned by SLCA done by retired HRM planner Jan Skora
- Canada Mortgage and Housing Corporation 1986 Jack Lake report is mentioned but one of 2 main reasons for not developing at Jack Lake is left out – the need for strict mitigations to protect the lakes
- Blue-Green Algae report of Nov 2024, confirmed by UNESCO
- Impacts from approved development in Bedford West Subareas 12 &1 which are within the Sandy Lake subwatershed
- The decomposing sludge in Sandy Lake since the 2013 cut of 300 acres
- Reports that Wild Atlantic Salmon and Mainland Moose are confirmed in the lake/watershed
- Archaeological 'pre-contact' study

All of the above-listed "missing" studies, and other "missing" studies, have also been sent to the Task Force. All missing studies can be accessed at:

https://www.dropbox.com/scl/fo/atrlmdpl9up4ag3fioxfj/ADBGT9WVEmbWS2fdUvt-cEc?rlkey=9rk7ist8yvkyho1sqzdyyozsx&e=1&st=juis8vcn&dl=0

4. Not all wetlands in the study area were visited and studied. From the RFP:

"Appendix A, Detailed Scope of Services, 3.3.1.1.1 Delineate, assess, and inventory all watercourses and wetlands..."

There are 24 wetlands in the Sandy Lake SPA Study Area as per Stantec's desktop and field work. The RFP required delineation, assessment, and inventorying of all wetlands in the Study Area, but Stantec reported only conducting these field assessments on 13 of the 24 wetlands. The work on wetlands is incomplete and should be completed in order to get a true picture of the watercourses and wetlands, and the potential impacts on them of development.

5. Wildlife corridors mapping is incomplete and incorrect.

- I. The wildlife corridor identification work completed by Natural Wonders Consulting Firm, which shows wildlife corridors in the study are left out of the Land Suitability Analysis. It should be included in the analysis and the map of wildlife corridors in the Study Area.
- II. 100m wide wildlife corridors are proposed over top of streams, which actually creates 50m terrestrial wildlife corridors on either side of stream, falling short of the 100m needed on each side. This is important for terrestrial species that cannot cross streams but can move or disperse over land. The mapping and analysis should be redone to truly include 100m wide terrestrial wildlife corridors on both sides of streams.
- III. Aquatic corridors are not considered, although they are needed and are proposed in the "Wildlife Corridor Landscape Design Charrette Report." Using the Charrette Report and potentially other sources of information, key aquatic corridors to be maintained should be proposed in the Study Area.

6. Biological Components weighting is different between the Sandy Lake SPA Interim/Draft report and the Final report. From the Interim/Draft report:

"Each of the three LSA figures for the biological components have been weighted equally and combined to show the overall summary LSA of biological components (Figure 3.17)."

From the Final report:

"Each of the three LSA figures for the biological components have been weighted and combined to show the overall summary LSA of biological components (Figure 3.17). Habitat LSA and Wetland LSA scores have been averaged and Stantec manually adjusted the weighting of policy-protected constraints including established environmental buffers such

as watercourse setbacks and wetlands intersected by watercourses. These features were deemed to have low development suitability and were manually emphasized as indicated by the red shading in Figure 3.17."

The change in weighting of components results in a map that shows more developable area in the Final report than in the Interim/Draft report.

C. Watershed and Stormwater Management

Main points from Dr. Patriquin's independent examination of the study:

- Stantec's background studies did not include Dr. Patriquin's limnological data, or that of Casey Doucet (although Doucet's study is listed in the references). Why was this data ignored?
- This data has ramifications, including that it indicates there may be issues with lake water quality that Stantec's work does not examine. These include very low deep water oxygen levels, and internal phosphorus loading.
- 3. Current development scenarios show building in the most sensitive area of the subwatershed (west side of Sandy Lake where the lake's tributaries are located).

For a deep dive into the extreme flaws in the Sandy Lake water quality section of the reports see Dr. Patriquin's Community Studies for Sandy Lake (Bedford, NS) Special Planning Area "ignore" critical data on water quality 25Jul2025

D. Traffic study

- 1. Traffic modeling looks at more than 6,000 units. The number of units considered varies across the background studies. This is problematic because the studies predict potential impacts for different numbers of units and development layout. Ultimately studies must be harmonized to predict impacts for a consistent number of units.
- 2. Traffic modeling includes a "Do Minimum" scenario that allows us to compare to a baseline. This should have been done for all elements being examined in background studies.
- 3. The traffic report does recognize that wildlife corridors from the Halifax Green Network Plan may be negatively impacted. All background studies should examine how wildlife corridors could be impacted.
- 4. The traffic study did not model a "Sandy Lake Connector" (Hammonds Plains Road to Hwy 101 connection). It is vital that potential impacts of "Sandy Lake Connector" be modeled if it is seriously being considered for construction. Its potential path lies right in the area where wildlife corridors are needed, and where the tributaries of Sandy Lake lie.

E. Servicing study

- 1. This infrastructure modeling work assumes a 30m buffer around wetlands and watercourses, not more. Again, the 50m 100m buffers must be considered.
- This infrastructure modeling works with Clayton's proposed development plan and does
 not avoid or modify development in the proposed wildlife corridors in Land Suitability
 Analysis. Wildlife corridors must be planned for an would likely involve avoiding or
 modifying development in the area where wildlife corridors are needed.

F. Across reports

1. Incorrect buffers for wetlands and watercourses

The buffers seem to be 30m in all modeling in the reports and maps of proposed development. But the "McCallum Report" and related HRM Council motion state that 50m – 100m buffers must be examined. This was not respected.

2. Wildlife corridors were only identified in the LSA. They were not used in the other studies.