**August 23, 2024**

Dear Editor, PLOS ONE.

We submit our revised manuscript “Patterns of Microbial Contamination on Northumberland Strait Shores” (**Manuscript No. PONE-D-24-05796**) for reconsideration for publication in PLOS ONE.

In this research article we outline our assembly, curation and deposition of 205,772 microbial water quality data records spanning over 80 years from Southeastern New Brunswick and the Northumberland Strait in the Gordon Foundation’s DataStream (https://atlanticdatastream.ca), an open access common platform for sharing structured information on fresh and marine water health. We present a preliminary analyses of contamination patterns at three representative sites on the Northumberland Strait coast of New Brunswick, to demonstrate how open data can be used to inform policy and management decisions.

We have removed all funding-related text from the Acknowledgments Section of our manuscript. Our Funding Statement remains unchanged. Our Acknowledgments Section has been amended to read:

“This project was supported by data specialists at The Gordon Foundation’s DataStream (https://atlanticdatastream.ca). Many Mount Allison University Environmental Microbiology students, student interns and volunteers contributed to the assembly of these data records, notably including S. Arthur, J. Beaulieu, S. Croft, E. Garlock, L. Genge, J. Harper, D.K. Kwon, A. MacCormack, M. Poole, P. Shaver, as well as research colleagues Dr. W. Li and M. Savoie.”

We have revised our Data Availability Statement of the submission form to indicate that data are currently available on DataStream (<https://atlanticdatastream.ca>) and from Environment and Climate Change Canada (<https://open.canada.ca/data/en/dataset/c8337cee-88b6-4ce5-89db-ba2ba22f2180#wb-auto-6>).

We have replaced copyrighted map (Figure 1) with a new map generated using 'sf' and 'rgdal' packages, running under R and R Studio (Posit Team, 2023; R Core Team, 2023).

We have amended our Supplementary Figures file type to “Supporting Information”.

We confirm that neither the manuscript nor any parts of its content are currently under consideration or published in another journal. All authors have approved the manuscript and agree with its submission to PLOS ONE.

Sincerely Miranda E. Corkum,

on behalf of Naaman M. Omar & Douglas A. Campbell