**February 8, 2024**

Dear Editor, PLOS ONE.

We submit our manuscript “Patterns of Microbial Contamination on Northumberland Strait Shores” for consideration 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 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