Global Water Futures 2021 Operations Team Meeting – Project Reporting Template

Instructions: All GWF projects are asked to provide a summary update on their activities and accomplishments in preparation for the upcoming Operations Team meeting. **Please submit these by email to chris.debeer@usask.ca by no later than December 2.** These will be used to help guide discussions and breakout synthesis activities and will be made generally accessible on our website in advance of the meeting.

Project Name:	What is Water Worth? Valuing Canada's Water Resources and Aquatic Ecosystem Services

Our major accomplishments to date are:

- Kicked-off project with team and international members (Spring 2021)
- Designed and administered a survey instrument to estimate the economic value of restoring the Saskatchewan River Delta
- Completed and published (in Canadian Water Resources Journal) a review of existing economic valuation literature related to water quality improvements in Canada
- Begun design of national stated preference survey
- Worked on the regional application of the water quality valuation model in the Great Lakes

Our current activities are:

- Planning Canadian water valuation seminar series for 2022
- Continue working on stated preference survey instrument
- Further developing the water quality valuation model for the Great Lakes

The main accomplishments expected by the end of the project are:

- Synthesize the existing economic valuation literature related to water quality improvements in Canada (published recently in 2021 here:https://doi.org/10.1080/07011784.2021.1973568
- Draft state-of-the-art non-market valuation guidelines for water practitioners to better inform policy and decision-making related to sustainable water use and management.
- Empirically test the validity and reliability of the guidelines for water practitioners.
- Connect the economic valuation of aquatic ecosystem services to available water quality monitoring data and policy-relevant biophysical indicators for the water quality challenge in question. Where possible, use will be made of available environmental models to assess changes in baseline water quality conditions due to water quality policy intervention scenarios. In particular, we aim to employ and update the current prototype of the Water Quality Valuation Model developed by ECCC as an integrated environmental-economic water quality modeling framework.
- Set up a geo-referenced national data and information system for the economic values of relevant aquatic ecosystem services across Canada, and
- Derive and test a generic Canadian water quality valuation function for aquatic ecosystem services that can be used by policy-makers to assess the benefits of improving water resources. We will explore potential collaboration with the Environmental Valuation Reference Inventory (EVRI), initiated in the 1990's by ECCC.

Here is a key visual from the project (figure, photo, table, graph, etc.)

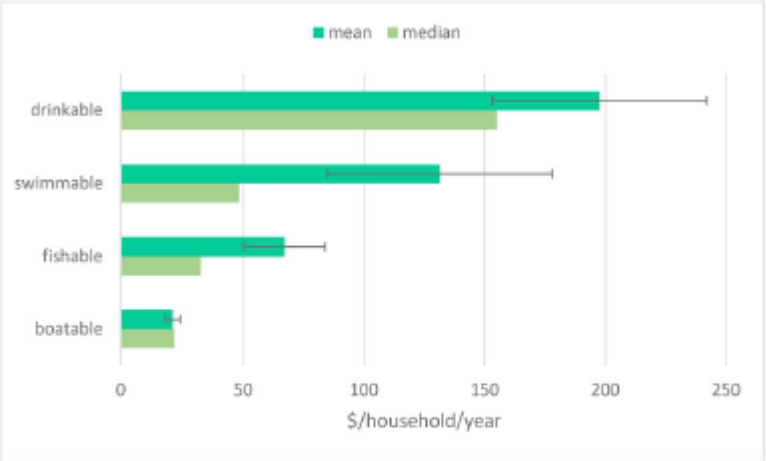

Figure 3. Mean and median values in 2019 Canadian dollars for different water uses on the water quality ladder extracted from 22 Canadian non-market valuation studies (error bars reflect the mean's standard errors).