

Reflections in the Water: How Indigenous Knowledge and Consent are Reflected in Fisheries Research

Reflections in the Water is an ongoing research project that seeks to discover to what extent Indigenous knowledge and consent are included in fisheries research. This piece of research provides one piece of the puzzle to answer the larger question of how fisheries research is changing to include Indigenous voices, knowledges, histories, and languages. With a collective responsibility to advance reconciliation, this work is crucial to continuing to push forward on a path of co-development, Indigenous self-determination, and empowerment. As per Wong et al.'s *Towards Reconciliation: 10 Calls to Action to Natural Scientists Working in Canada* (Wong, Ballegooyen, Ignace, (Gudia) Johnson, & Swanson, 2020), Indigenous voices are traditionally excluded from Western science. Inspired by these calls to action, *Reflections in the Water's* focus on co-development defines it as a voluntary Indigenous partnership in projects from the design stage through to the completion of the project and management of the data and/or resource in question.

Reflections in the Water explores if there are protocols or frameworks for; seeking Indigenous consent and participation in research, providing Indigenous groups with a voice for desired outcomes, and enabling research to fully benefit the community even after the projects' completion. Methods to accomplish this included intensive literary review and interviews with university researchers from across the country who are involved with fisheries research to discuss their design process and the level of Indigenous inclusion their projects have. Literary review showed that though researchers are calling for increased co-development of knowledge, much work still

needs to be done in the fisheries-specific context. This complexity could be due to the conflicting interests in fisheries (federal government, provincial governments, local communities), and the wide scope of the types of fisheries (commercial, recreational, Indigenous, international). Interviews with participants confirmed that there is no broad consensus on how to engage with Indigenous Peoples to initiate fisheries research. Some participants noted a lack of knowledge of appropriate protocol to approach a community/group, and more clearly, a lack of time given by funders to build meaningful and long-lasting relationships before commencing the research project. Participants shared various experiences from government-funded to privately funded research, and a common theme was that funders rarely require research teams to build relationships with Indigenous Peoples, nor do they usually require any level of co-development or partnerships on projects.

Though this hardly seems like a drop in the ocean, the door is open for continued research on how fisheries research (and funding models) can be made more inclusive of different knowledge systems. With more knowledge on what is and isn't working in fisheries, my next steps for this research will be to expand my knowledge of how academic research is evolving to include Indigenous Peoples, and eventually further my research into local Indigenous, provincial, and federal contexts. In a co-authored paper I am currently working on, which seeks to outline strategies for actionable fisheries research, I will be drawing on my research to outline how stronger co-development and inclusion of Indigenous voices leads to more successful and complete fisheries research and management. Using this research as the foundation for my graduate studies and upcoming presentation at the World Fisheries Congress in Seattle, WA in

March 2024, *Reflections in the Water* will become a staple of the work I do to discover frameworks to uplift Indigenous voices in fisheries research and management. We all have a responsibility to advance reconciliation, and though this is research done in the world of fisheries, *Reflections in the Water* will be an example of why Indigenous knowledge, consent, and co-development are essential in environmental research and resource management at a time of crisis with loss of habitats and biodiversity.

References

- Wong, C., Ballegooyen, K., Ignace, L., (Gudia) Johnson, M., & Swanson, H. (2020). Towards reconciliation: 10 Calls to Action to natural scientists working in Canada. *FACETS*, 769-783. Retrieved from <https://www.facetsjournal.com/doi/10.1139/facets-2020-0005>