

****ABSTRACT NOT FOR CITATION WITHOUT AUTHOR PERMISSION.** The title, authors, and abstract for this completion report are provided below. For a copy of the full completion report, please contact the author via e-mail at STEVEN_COOKE@CARLETON.CA. Questions? Contact the GLFC via email at stp@glfc.org or via telephone at 734-669-3006. **

FROM FISH MOVEMENT TO KNOWLEDGE MOVEMENT: UNDERSTANDING AND IMPROVING SCIENCE TRANSFER RELATED TO TELEMETRY

Steven J. Cooke², Vivian M. Nguyen², Nathan Young³, Chris Vandergoot⁴, Chuck Krueger⁴

² Carleton University, Ottawa, ON, Canada

³ University of Ottawa, Ottawa, ON, Canada

⁴ GLATOS, Michigan State University, East Lansing, MI, USA

May 2022

ABSTRACT:

Beginning in ~2010, the GLFC has invested millions of dollars in telemetry infrastructure and projects related to native fish restoration and improving sea lamprey control. The establishment of the Great Lakes Acoustic Telemetry Observation System (GLATOS) provides an opportunity for fish telemetry researchers to share data and resources. However, sharing telemetry findings with the management community and having that information embraced and used within decision making may prove more difficult. Are managers prepared for an entirely new type of knowledge about fish? Do they understand the biases and limitations of telemetry data relative to other tools they use, and how does this influence their willingness to trust and use such data? What can be done to help managers understand the strengths and limitations of telemetry data? What can be done to share success stories with managers? Is it possible to work with managers to identify research priorities that could be addressed with telemetry? Telemetry data could have a major impact on the management of fish in the Laurentian Great Lakes if the proper transfer of that information is made to managers. The overall goal of this project was to understand and improve science transfer related to fish telemetry in the Laurentian Great Lakes. Using a combination of activities (ranging from social science surveys to workshops and production of management briefs) we focused efforts on attempting to facilitate effective knowledge mobilization and bi-directional communication (between scientists and managers) related to fish telemetry data in the

Laurentian Great Lakes. To do so, we had four inter-related project components (and objectives). 1. Identify barriers and opportunities; 2. Be clear about limitations; 3. Share successes; and 4. Increase relevancy. We generated a number of products that will be used by managers and telemetry practitioners to ensure that telemetry data are used in ways that maximally benefit the management of the Laurentian Great Lakes and those responsible for their stewardship.