



University  
of Victoria

Graduate Studies

Notice of the Final Oral Examination  
for the Degree of Master of Arts

of

**TRACEY ANGELA PROVERBS**

BA&Sc (McGill University, 2014)

**“Social-ecological Change in Gwich’in Territory: Cumulative Impacts  
in the Cultural Landscape, and Determinants of Access to Fish”**

School of Environmental Studies

Thursday, August 22, 2019

10:00 A.M.

David Turpin Building

Room B255

Supervisory Committee:

Dr. Trevor Lantz, School of Environmental Studies, University of Victoria (Supervisor)

Dr. Natalie Ban, School of Environmental Studies, UVic (Member)

External Examiner:

Dr. Brian Thom, Department of Anthropology, UVic

Chair of Oral Examination:

Dr. Julie Zhou, Department of Mathematics and Statistics, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies

## Abstract

In the territory of the Gwich'in First Nation, in Canada's Northwest Territories, environmental, sociocultural, and economic changes are affecting relationships between communities and the land and water. In this thesis, I used two research projects to explore the impacts of social-ecological change in Gwich'in territory by examining cumulative impacts in the cultural landscape, and determinants of access to fish and well-being. In the first part of my MA, I used spatial overlay analysis to quantify and map: 1) cultural feature intensity, 2) cumulative environmental disturbance, and 3) overlap between disturbances and cultural features. I also interviewed four regional cultural heritage experts, who contributed critical insights into representing Gwich'in cultural features. The first two analyses indicated that overlay methods can facilitate understandings of cultural land use and cumulative impacts, illustrating Gwich'in territory as a cultural landscape encompassing widespread, dense cultural features and diffuse, lower intensity cumulative environmental impacts. The third analysis showed that overlaying cultural feature and disturbance data is a novel, straightforward step to better incorporating cultural impacts in cumulative impact assessments. Many of the changes I mapped are affecting fishing practices central to Gwich'in livelihoods. To better understand these changes, in the second part of my MA I explored the relationship between drivers of access to fish and well-being amidst social-ecological change, by interviewing 29 Gwich'in individuals. My interviews showed that socioeconomic and environmental barriers have decreased access to fish. Yet, fish remain critical to Gwich'in well-being, driven by socioeconomic factors like sharing networks and adaptive practices that are encompassed in ecological monitoring and land-based education. These factors may help strengthen Gwich'in fishing livelihoods into the future, and highlight the importance of monitoring programs like the Rat River Char Monitoring program, and land-based education like the *Ganahghootr'onatan* – Teet'it Land Based Learning Project.