COMMUNITY EXPERIENCES WITH RESEARCH IN NUNAVUT

MAKING RESEARCH WORK FOR NUNAVUMMIUT:

UNDERSTANDING COMMUNITY EXPERIENCES WITH RESEARCH LICENSE REVIEW ACROSS NUNAVUT

By ALEXIS BELTRANO, B.Sc., MA

A Thesis submitted to the School of Earth, Environment, and Society in partial fulfillment of the requirements for the Degree Doctor of Philosophy

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TITLE: Making Research Work for Nunavummiut: Understanding Community Experiences with Research License Review across Nunavut

AUTHOR: Alexis Beltrano, B.Sc., MA (McMaster University) SUPERVISOR: Dr. Gita Ljubicic

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LAY ABSTRACT

In Nunavut, scientific research involving air, land, water, or people requires a license for work in or about the Territory. The Nunavut Research Institute (NRI) is responsible for facilitating a research license review (RLR) process. License review involves community consultations with RLR organizations to inform decisions about license approvals. In partnership with the NRI, this project was designed to learn from community experiences with RLR in relation to:

1. Group structure and responsibilities for different review organizations;
2. Ways to improve RLR organization interactions with the NRI and researchers;
3. Opportunities and challenges with RLR from community organization perspectives; and,
4. The development of a Nunavut research portal to enhance communications and reporting.

Surveys revealed community organizations review up to 64 applications annually, though most receive closer to 10. Interviews revealed funding, training, and staff shortages as barriers to meaningful license review. A collaborative analysis workshop emphasized the need for improved capacity, training, community engagement, and communications for researchers, RLR, and the NRI. Recommendations are identified to help research licensing achieve its goals of minimizing harm, facilitating community consultation, and tracking and monitoring research. Supporting Inuit leadership and strengthening researcher accountability in research licensing is critical in the process towards achieving Inuit self-determination in research.

ABSTRACT

In Nunavut, scientific research involving air, land, water, or people requires licensing under Nunavut's Scientists' Act, administered by the Nunavut Research Institute (NRI). Through research license review (RLR) processes, the NRI facilitates community consultations informing licensing decisions. Although RLR aims to support meaningful engagement, its effectiveness remains uncertain. Increasing calls to strengthen ethical research conduct, communication, and transparency highlight such gaps in current RLR processes. Recognizing this, NRI identified the need to examine RLR processes to better support Inuit self-determination research. In partnership with the NRI, I undertook an investigation to better understand these gaps, through 4 main objectives:

1. Learn about group structure and responsibilities for different organizations that review research license applications in Nunavut;
2. Seek input on ways to improve interactions between review organizations, the NRI and researchers in the licensing review process;
3. Explore opportunities and challenges with research license review from community perspectives; and,
4. Mobilize lessons learned to inform the development of a Nunavut research portal to enhance communications and reporting.

First, an online survey of 20 respondents identified RLR organizations receive up to 64 applications annually. Annually, 40% receive one to ten applications, and 55% review all applications. Compensation for reviewing and access to research results is limited. Next, 16 semi-structured interviews revealed funding, training, and staff shortages as barriers to reviewing applications. Interview participants call for guidance from NRI to facilitate organizational RLR processes. Participants reiterated the lack of accessible research results. Last, an in-person workshop emphasized variation of review criteria across RLR organizations. Common themes to improve RLR included training to support organizational capacity, increased community engagement, and improved coordination from researchers and licensing agencies.

This investigation identified opportunities to improve research outcomes for Nunavummiut (people of Nunavut). To act on these findings, recommendations for researchers, RLR organizations, and the NRI are identified to help research licensing achieve its goals of minimizing harm, tracking and monitoring research, and facilitating community consultation and engagement. Strengthening the process of reviewing and approving research is a critical starting point towards achieving Inuit self-determination in research.

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TABLE OF CONTENTS

1.0 Introduction……..…….....……2
1.1 Research context……2
1.1.1 Evolution of research relationships……..……5
1.1.2 Research goals and objectives……...……..9
1.2 Licensing and permitting of research in Inuit and international Indigenous homelands.....10
1.2.1 Licensing in Nunavut.....10
1.2.2 Licensing in Inuit Nunangat.....11
1.2.2.1 Inuvialuit Settlement Region.....12
1.2.2.2 Nunavik.....13
1.2.2.3 Nunatsiavut.....14
1.2.3 International licensing.....14
1.2.3.1 New Zealand.....14
1.2.3.2 Greenland.....16
1.2.3.3 United States of America.....17
1.3 Research design.....20
1.3.1 Positionality……...……...20
1.3.2 Theoretical approach for community-engaged research……..….20
1.3.2.1 Pittiarniq (being good or kind).....24
1.3.2.2 Inuuqatigiinniq (being respectful of others).....24
1.3.2.3 Unikkaaqatigiinniq (the power and meaning of storytelling).....25
1.3.2.4 Iqqaumaqatigiinniq (when ideas or thoughts come into "one").....25
1.4 Thesis structure and contents.....26
1.4.1 Chapter 2.....26
1.4.2 Chapter 3.....27
1.4.3 Chapter 4.....28
1.4.4 Chapter 5.....29

2.0 Insights into community experiences with research license review across Nunavut……..…....30
2.1 Introduction.....30
2.2 Background on research license review in Nunavut……....…….....34
2.3 Methods.....36
2.3.1 Licensing Review Data.....36
2.3.2 Survey of community review experiences……..….....37
2.3.2.1 Survey co-development.....37
2.3.2.2 Survey instrument.....38
2.3.2.3 Survey recruitment.....39
2.3.2.4 Survey response rate.....41
2.3.3 Data analysis.....42
2.3.3.1 Descriptive statistics.....42
2.3.3.2 Thematic analysis.....43

2.4 Results....45
2.4.1 Research license review requests....45
2.4.2 Research license reviewer experiences....47
2.4.2.1 License review volume....47
2.4.2.2 License review process....49
2.4.2.3 Time spent conducting research license reviews....50
2.4.2.4 Review responsibility....51
2.4.3 Review criteria....52
2.4.4 Review and compensation....57
2.4.5 Communications with the Nunavut research institute....58
2.4.6 Opportunities and challenges....64
2.5 Discussion....66
2.5.1 Refining research license review processes....67
2.5.1.1 Resources and funding for license review....67
2.5.1.2 Technical support for applications....68
2.5.1.3 Establishing research license review criteria....70
2.5.1.4 Identifying terms and conditions....71
2.5.2 Reimagining research design....72
2.5.3 Improving research reporting....77
2.6 Conclusions....78
2.6.1 What can organizations do?....81
2.6.2 What can the Nunavut Research Institute do?....81
2.6.3 What can researchers do?....82
2.7 References....84

3.0 Is research license review meeting expectations? Learning from Nunavut community review experience....98
3.1 Introduction....98
3.1.1 Research licensing background and criteria....101
3.2 Methods....103
3.2.1 Semi-structured interview development....103
3.2.2 Identifying and recruiting reviewers....104
3.2.3 Interview facilitation....105
3.2.4 Interview participants....106
3.2.5 Interview thematic analysis....108
3.2.6 Coding interview responses: Matrix query analysis....109
3.3 Results....110
3.3.1 Research priorities....110
3.3.1.1 Community relevance and engagement during research license review....110
3.3.1.2 Research license review logistics and personnel....112
3.3.1.3 Quality and clarity of research license applications....112
3.3.1.4 Research ethics and governance....113
3.3.2 Challenges with review....114
3.3.2.1 Administrative challenges....115
3.3.2.2 Expertise-related challenges....116

3.3.2.3 Logistical challenges....116
3.3.2.4 Scope and relevance....117
3.3.3 Opportunities for research license review....118
3.3.3.1 Administrative enhancements....118
3.3.3.2 Facilitate capacity building....119
3.3.3.3 Better support for community engagement....120
3.3.3.4 Enhance research license review processes....120
3.3.4 Reporting....121
3.4 Discussion....122
3.4.1 Does community consultation in research licensing help to achieve self-determination in research?....123
3.4.2 Is licensing meeting the goal of tracking and monitoring research?....128
3.4.3 Is research licensing meeting the goal of minimizing harm?....132
3.5 Concluding remarks....136
3.5.1 Recommendations for improving community engagement....137
3.5.2 How can research licensing help track and monitor research?....140
3.5.3 How can research licensing help minimize harm and improve Inuit self-determination?....141
3.6 References....143

4.0 Lessons learned from understanding community experiences in the research license review process in Nunavut....155
4.1 Introduction....155
4.1.1 Calls to improve research practices....155
4.1.2 Research licensing as a mechanism for Inuit self-determination in research....156
4.1.3 Understanding community experiences with research license review....157
4.2 Methods....159
4.2.1 Where the workshop was held....159
4.2.2 Who was invited to the workshop....159
4.2.3 Workshop format: World Café....162
4.2.4 Thematic analysis of workshop discussions....166
4.3 Results....168
4.3.1 Criteria and priorities when reviewing applications....168
4.3.1.1 Relationships and partnerships with the community....168
4.3.1.2 Community benefits and relevance....169
4.3.1.3 Training opportunities....170
4.3.2 Receiving research results....170
4.3.2.1 Actionable research results....170
4.3.2.2 Community based reporting....171
4.3.2.3 Tracking and regulating reporting outputs....172
4.3.3 Support needed from licensing and permitting agencies to facilitate a meaningful review….....173
4.3.3.1 Funding....173

4.3.3.2 Training opportunities....173
4.3.3.3 Procedural improvements....174
4.3.4 Support needed from researchers to facilitate a meaningful review process....175
4.3.4.1 Improved coordination in applications and reporting....175
4.3.4.2 Communicate expectations....176
4.3.4.3 Increase opportunities for community engagement....176
4.4 Discussion....177
4.4.1 Reporting is a part of researcher accountability, and contributes to evidence-based decision-making....177
4.4.2 Investing in research license review capacity and relational processes enhances research governance according to Inuit values....180
4.4.3 Research license review organizations defining research priorities and criteria, along with authority of enforcement, is implementing self-determination....182
4.5 Conclusion....184
4.6 References....187

5.0 Conclusion....202
5.1 Reflecting on community experiences with research license review....202
5.1.1 Patience is key: Take the time build relationships and develop rapport....202
5.1.2 Provide training for research stakeholders....205
5.1.3 Invest in capacity: More resources needed to support community-engaged research and license/permit review....209
5.1.4 Enhance efficiency: Increase the percentage of applications reviewed.... 213
5.1.5 Expand Isirvik: The value in having a research license application, review, and reporting portal....214
5.1.6 Refine reporting: Communication at the heart of good research....215
5.2 Recommendations for research licensing in Nunavut....217
5.2.1 Technical advancements to the Isirvik research portal....218
5.2.2 Legislative reform of the Nunavut Scientist's Act....221
5.3 Ongoing commitments and next steps: Developing a guide for reviewers...221
5.4 Concluding remarks....227
5.5 References (for Introduction & Conclusion) 231

6.0 Appendices....244
Appendix 1.1 Key research partners involved in my thesis....244
Appendix 1.2: Nunavut Research Institute Scientific Research License Application...(Online form, for all disciplines)....247
Appendix 1.3: Additional permits or licenses required for research in Nunavut....255
Appendix 2.1: Survey materials – PDF copy of online survey (English)....256
Appendix 2.2: Survey materials – PDF Version of online survey (Inuktitut)....265

Appendix 2.3: Survey recruitment materials – Project overview.....276
Appendix 2.4: Survey recruitment materials – Letter of information.....278
Appendix 2.5: Survey recruitment materials – Initial email blast sent from NRI.....282
Appendix 2.6: Survey recruitment materials – Follow-up email.....285
Appendix 2.7: Survey recruitment materials – Phone follow-up script.....286
Appendix 3.1: Interview recruitment materials – Project overview.....287
Appendix 3.2: Interview recruitment materials – Letter of information.....289
Appendix 3.3: Interview recruitment materials – Email for current reviewers.....293
Appendix 3.4: Interview recruitment materials – Email for previous reviewers.....294
Appendix 3.5: Interview recruitment materials – Phone follow-up script.....295
Appendix 3.6: Interview materials – Consent form.....296
Appendix 3.7: Interview materials – Interview guide.....297
Appendix 3.8: Coding framework used for interview thematic analysis (submitted with manuscript) 301
Appendix 4.1: Workshop recruitment materials – Project overview.....302
Appendix 4.2: Workshop recruitment materials – Letter of information.....304
Appendix 4.3: Workshop recruitment materials – Initial email for workshop.....308
Appendix 4.4: Workshop materials – Agenda and outline.....309
Appendix 4.5: Workshop analysis – Emerging codes and thematic codes.....310

LIST OF FIGURES

Figure 1.1: Map of Nunavut territory with communities and administrative regions…….4

Figure 1.2: Isirvik demonstration workshop in Iqaluit, Nunavut……7

Figure 1.3: Map of Inuit Nunangat (Indigenous Peoples Atlas of Canada, 2024)…….12

Figure 1.4: The Qaujigiartiit Health Research Centre's Piliriqatigiinniq Partnership Model for Community Health Research (QHRC 2019)……..…23

Figure 2.1: Distribution of affiliation type for survey respondents……..41

Figure 2.2: List of organizations that review applications to conduct research in Nunavut.....42

Figure 2.3: Survey implementation timeline.....44

Figure 2.4: Distribution of Nunavut Research Institute research license review requests (sent to reviewing organizations 2004 – 19).....47

Figure 2.5: Nunavut Research Institute research license review requests (sent to regional Inuit Associations 2004 – 19).....49

Figure 2.6: Distribution of Nunavut Research Institute research license review requests sent to Hamlet offices (2004 – 19).....51

Figure 2.7: Nunavut Research Institute research license review requests to Hamlet offices over time (2004 – 19).....52

Figure 2.8: Distribution of Nunavut Research Institute research license review requests sent to Hunters and Trappers Organizations/Associations (2004 – 19).....53

Figure 2.9: Nunavut Research Institute research license review requests to Hunters and Trappers Organizations/Associations over time (2004 – 19).....53

Figure 2.10: Number of licenses reviewed by survey respondents per year.....54

Figure 2.11: Percentage of licenses reviewed in a year, as reported by nine survey respondents who do not review all applications received from the Nunavut Research Institute.....54

Figure 2.12: Review process for survey respondents.....55

Figure 2.13: Time it takes for organizations to review a single license.....55

Figure 2.14: Reviewing practices within the organization.....56

Figure 2.15: Compensation for reviewing research licenses, as reported by 17 survey respondents.....56

Figure 2.16: Sufficiency of time given to review licenses.....57

Figure 2.17: Frequency of feedback shared with the Nunavut Research Institute.....60

Figure 2.18: Method of providing feedback to the Nunavut Research Institute.....61

Figure 2.19: Frequency with which respondents shared concerns about license applications with the Nunavut Research Institute.....61

Figure 2.20: Frequency with which respondents requested terms and conditions from license applicant.....62

Figure 2.21: Frequency with which respondents receive researchers' annual reports from the Nunavut Research Institute.....65

Figure 2.22: Series of responses for levels of agreement with the RLR process.....66

Figure 3.1: Interview participant organization affiliation……..……..107

Figure 3.2: Distribution of priorities with reviewing applications……..…110

Figure 3.3: Distribution of community relevance and engagement sub-themes…….…111

Figure 3.4: Distribution of challenges with reviewing applications……..……..114

Figure 3.5: Distribution of administrative challenges sub-themes……..……116

Figure 3.6: Distribution of opportunities for reviewing applications.....118

Figure 3.7 Distribution of administrative enhancements……...…..119

Figure 4.1: Spatial distribution of workshop participants, location, and project partners.....161

Figure 4.2: Workshop participant organization affiliation.....162

Figures 4.3: Workshop participants engaging in discussions.....164

Figure 4.4: Diagram of the world café and questions asked. .....,.....166

Figure 4.5: Three overarching themes from each question asked in the world café.....167

Figure 5.1: Key messages based on insights from community experiences with research license review in Nunavut.....203

Figure 5.2: Mockup of an Isirvik review portal for incoming applications and reports.....220

Figure 5.3: Mockup of how review organizations can select a status update, write feedback, or upload media to accompany review decision recommendation.....220

LIST OF TABLES

Table 2.1: Compilation of research considerations outlined in five community, regional, and National Inuit research guidelines.....73

Table 2.2: Recommendations for Research License Review Organizations, the Nunavut Research Institute, and those conducting research in Nunavut, to improve license review processes.....80

Table 3.2: Number of times each theme was mentioned with respect to specific stakeholder role/responsibility.....124

Table 3.3: Recommendations, potential impact, and stakeholder responsible for the three main goals of research licensing.....139

Table 4.1: Approach used for our world café (adopted from McGrath et al., 2023).....163

Table 5.1: Recommendations for expanded functionality of the Isirvik research portal.....219

Table 5.2: Potential ideas for amending the Nunavut Scientist's Act to strengthen review organization authority in the research licensing process.....223

Table 5.3: Examples of the levels of risk for NRI projects, and recommended review protocol.....226

Table 5.4: NISR priority areas and objectives for each priority (from ITK, 2018a).....229

LIST OF ABBREVIATIONS

Abbreviation	Definition
ARI	Aurora Research Institute
CCA	Council of Canadian Academies
CRC	Community Review Committee
CRO	Community Research Organization
GCRC	Geomatics and Cartographic Research Centre
GN	Government of Nunavut
GNWT	Government of Northwest Territories
H	Health
HAM	Hamlet Office
HTA	Hunters' and Trappers' Association
HTO	Hunters' and Trappers' Organization
ICC	Inuit Circumpolar Council
IO	Inuit Organization
IPG	Institution of Public Government
IQ	Inuit Qaujimajatuqangit
ITK	Inuit Tapiriit Kanatami
MA	Master of Arts
NAC	Nunavut Arctic College
NIRB	Nunavut Impact Review board
NISR	National Inuit Strategy on Research
NRI	Nunavut Research Institute
NTI	Nunavut Tunngavik Incorporated
NWB	Nunavut Water Board
NWMB	Nunavut Wildlife Management Board
NWT	Northwest Territories
P	Physical/ Natural
POLAR	Portal to Online Applications for Research
QHRC	Qaujigiartiit Health Research Centre
QIA	Qikiqtani Inuit Association
RA	Research Assistant
RIA	Regional Inuit Association
RLR	Research License Review
SS	Social Science
SSHRC	Social Sciences and Humanities Research Council of Canada
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
USA	United States of America

DECLARATION OF ACADEMIC ACHIEVEMENT

This thesis is comprised of 5 chapters that are based on three academic research papers, in addition to an introduction/background and conclusion chapter. Chapter 2 is accepted and is currently in press in the peer-reviewed journal *Arctic*, while Chapter 3 was submitted to the *Canadian Journal of Research, Society, and Development* and is currently under review. Chapter 4 will be submitted to the journal *Canadian Geographies* in late Spring 2026. The thesis discusses community experiences with research license review of NRI research license application in Nunavut. There is some overlap in terms of the introduction and research focus as each chapter expands the previous one to better understand individual and group experiences while reviewing research applications. Research activities completed by myself, Alexis Beltrano, included a review of relevant literature, survey, semi-structured interviews and transcription, thematic coding and analysis, writing up results. My thesis supervisor, Dr. Gita Ljubicic, along with Dr. Natalie Carter, Jamal Shirley, and Jade Owen, are co-authors of all three chapters. Dr. Alison Perrin is only a co-author of chapter 2 due to her specific support with research license review trends in Nunavut. Chapter 4, the in-person workshop, was led by me, while co-author Dr. Natalie Carter facilitated note taking, while Jamal Shirley, and Jade Owen participated in the workshop as representatives of research licensing agencies. All co-authors provided similar support with collaborative guidance in developing research methodologies, analysis and interpretation of key findings, and editorial reviews.

CHAPTER 1

INTRODUCTION

1.1 Research context

Many Inuit feel they are not adequately involved in research happening in and around their communities, and that they are not seeing sufficient local benefits from research outcomes (Beltrano et al., 2026; Carter et al., 2019; ITK, 2018; ITK & NRI, 2007; Polidoro et al., 2024; Pulsifer et al., 2014). These concerns stem from the colonial research legacy in Canada's North. For years, researchers visited Inuit homelands using institutionalized funding to answer research questions for their own benefit (ITK, 2018). Consequently, Inuit suffered from unequal research relationships and were unable to address research questions of their own (ITK, 2018). To transform research relationships, Inuit, governments, and research institutions are working together to reclaim their rights to self-determination (Brunet et al., 2016; ITK, 2018). Through documentation such as the National Inuit Strategy on Research (NISR), the inclusion of Inuit in decision-making was made critical for all research activities in or about their homelands (ITK, 2018). Institutions of public government have also recognized the importance of incorporating Indigenous knowledge as the priority for undertaking social sciences research in Nunavut (NIRB, n.d). Despite such efforts, research practices involving Nunavummiut must be improved (Gearheard & Shirley, 2007; ITK & NRI, 2007; Shirley, 2005).

In Nunavut (Figure 1.1), efforts to improve community engagement in research include the establishment of a scientific research licensing process, where any person collecting new information on air, land, water or people is subject to a scientific research license, as

outlined in the Nunavut Scientist's Act (NRI, 2025; SC 1988, c.S-4). A scientific research license can be in the physical, health, or social sciences/Inuit Qaujimajatuqangit (IQ) disciplines. The term IQ refers to the body of Inuit knowledge and experienced that is passed down from generation to generation (Karetak et al., 2017). The act is administered by the Nunavut Science Advisor, which is an appointed position from the Minister responsible for the Nunavut Arctic College (See Chapter 3). Currently, the Science Advisor is the Director of Innovation and Research at Nunavut Arctic College (NAC). The act is administered as a Scientific Research License by the Nunavut Research Institute (NRI) (NRI, 2025). The NRI was established in 1984 in combination with the Science Institute of the Northwest Territories (NRI, 2021), where the primary responsibility was administering research licenses. Since then, the scope of NRI responsibility has grown, guided by a mandate "to develop, facilitate, and promote scientific research as a resource for the wellbeing of people in Nunavut" (NRI, 2024, para. one). The NRI is also responsible for providing mentorship, guidance, and support to scientists working throughout the territory, while also helping to broker research partnerships that address needs and concerns of Nunavummiut (NRI, 2024). It is evident that research activities in Nunavut must be in the best interest of Nunavummiut (people of Nunavut) to achieve self-determination. Research partnerships brokered by the NRI extend across various affiliations, including academic researchers, government agencies, and industry (NRI, 2021). The NRI also functions as the science division of NAC and is mandated to support development of research capacity at NAC through outreach, college programs, and youth initiatives (NRI, 2021).



Figure 1.1: Map of Nunavut territory with communities and administrative regions

Research licensing protocols in Nunavut are essential for Nunavummiut ownership and management of research activities in the Territory, in addition to monitoring what activities are occurring where. Since 2019 the NRI has partnered with McMaster and Carleton Universities to review research trends since 2004 (when digital licensing records began), to update the structure and technology of their licensing database (now known as Isirvik), and to learn about community experiences with license review. All of this has been in an effort to improve the ways that research is engaging - and benefitting - Nunavummiut.

1.1.1 Evolution of research relationships

This work has evolved from long-time collaborative efforts between my supervisor, Dr. Gita Ljubicic, and Jamal Shirley (Science Advisor at the NRI), beginning in 2003. Jamal was instrumental in advising Gita early in her graduate research, and together with Dr. Scot Nickels (then at ITK), they edited the guide for Negotiating Research Relationships with Inuit Communities (ITK & NRI, 2007). Since then, Jamal has provided valuable guidance throughout several research projects Gita has led, they have served on federal committees together and been involved in joint conference sessions and presentations. In 2018, they worked together to secure a SSHRC Partnership Engage Grant to conduct the first ever systematic review of the Isirvik research portal. This funding paved the way for my initial involvement with Gita and the NRI, through undergraduate and graduate research assistant (RA) positions for two summer terms (2019 & 2020) executing initial cross-checking and validation of Isirvik (Polidoro, 2022; Polidoro et al., 2024). During the developmental stages of the current Isirvik portal, all licensing information was transferred from NRI's former Microsoft Access database to (what is now) Isirvik. After the import, there were

formatting issues and missing content that required immediate data cleaning. I was responsible for cross-checking over 2,300 license entries (from 2004-2019) in Isirvik with the physical license and application to ensure accuracy and completeness. I also linked multi-year projects to one another to visualize long-term projects, and added the plain language summaries in English, Inuktut (official Inuit language), and French (if available). As Isirvik was in the early stages of development to becoming a public-facing portal, it was critical to enrich each license entry with as much available information as possible. Between the first and second RA term, my involvement in the project expanded as I accepted an offer at McMaster University to pursue my Master's (MA) research, to undertake a review and analysis of social science and traditional knowledge research trends according to Isirvik (Polidoro et al., 2024).

After the second RA term, I began my MA thesis where I undertook a systematic review of 568 social science research projects within Isirvik to identify the frequency and diversity of research undertaken in Nunavut according to leadership, location, topics, methods, reporting, and timeframe (Polidoro, 2022). Results highlighted that social science research in Nunavut has increased over time and is predominantly led by Canadian academics, with the highest concentration of research being in Iqaluit, Pond Inlet, and Pangnirtung (Polidoro, 2022; Polidoro et al., 2024). Social science research was mainly focused on cultural topics, conducted using interviews, and shared in peer-reviewed journal articles. My MA research directly responded to NRI priorities contributing to improving their operations, increasing community awareness of research activities, and informing science policy in Nunavut.

As part of my Master's thesis and RA contributions, I supported NRI with the public release of Isirvik. Currently, Isirvik is now a public research portal where individuals with internet access can view research licensed in Nunavut from 2004-2025. The release of Isirvik was first demonstrated at ArcticNet Annual Scientific Meeting in Iqaluit, where I co-led a workshop with both NRI and Carleton University (Figure 1.2). Isirvik completed Phase one of development in Winter 2024, Phase two included the integration of a mobile interface that was officially launched in Winter 2025. The NRI hired me in Winter 2023 as a research assistant (where I continue to be employed on a contractual basis), where my duties include managing the development of Isirvik and coordinating outreach and next steps with the different groups involved.



Figure 1.2: Isirvik demonstration workshop in Iqaluit, Nunavut
(Photo credit: Peter Pulsifer)

Our research team brings together a diverse group of academic and northern research practitioners with extensive experience leading, conducting, facilitating, reviewing, and overseeing research in Nunavut (See Appendix 1.1), and in other Inuit homelands in Canada and around the Circumpolar Arctic. A team approach is essential to address the complexity of issues related to enhancing Nunavummiut self-determination in research and to engage organizations working across physical, social/IQ, and health sciences research.

Through these experiences, there were questions raised which inspired my interest to pursue a PhD that expanded on my MA research. For example, I noticed there was an intense number of research license review (RLR) requests for communities (See Figure 2.4). Review requests are shared with RLR organizations (Hamlets, HTAs, Inuit Organizations, Institutions of Public Government, Territorial Government) who are responsible for suggesting changes and identifying potential impacts to the proposed research activities (NRI, 2021). This raises the question whether Nunavummiut can adequately address each application that is received, and if their research priorities are being addressed. My doctoral thesis research builds on this vital component to NRI's research licensing administration and is part of a new project funded by a Social Sciences and Humanities Research Council (SSHRC) Insight Grant. The project is co-led by the NRI, McMaster University, and the Qaujigiartiit Health Research Centre (QHRC) (see Appendix 1.1 for research partners). Through this grant, I was able to support the expansion of this project through my doctoral research, where I had the opportunity to engage with research review organizations across Nunavut, as part of a collaborative and iterative

assessment of the research licensing review process to identify notable changes to how research is managed and administered in Nunavut.

1.1.2 Research goals and objectives

My Research question is: *How can the research license review and reporting processes be improved to ensure better research outcomes for communities in Nunavut?* To address my research question, I have 4 objectives, including to:

1. Learn about group structure and responsibilities for different organizations that review research license applications in Nunavut;
2. Seek input on ways to improve interactions between review organizations, the NRI and researchers in the licensing review process;
3. Explore opportunities and challenges with research license review from community perspectives; and,
4. Mobilize lessons learned to inform the development of a Nunavut research portal to enhance communications and reporting.

Ultimately, through these objectives and intended outcomes of my doctoral research, I aim to provide opportunities and recommendations to enhance the capacity of the NRI and RLR organizations across Nunavut to better manage, direct, conduct, and apply research for the benefits of Nunavummiut.

1.2 Licensing and permitting of research in Inuit and international Indigenous homelands

1.2.1 Licensing in Nunavut

The NRI administers approximately 60% of research licenses in Nunavut (Polidoro 2022; Polidoro et al., 2024), including research involving the territories air, land, water, and people (NRI, 2021). The other 40% of research permits include research focused in parks, protected areas (including marine), birds, and other wildlife (Appendix 1.3). These categories are split into three disciplines of research licenses: Health Science, Social Science/IQ, and Physical Science. Principal investigators are responsible for self-identifying the discipline for their research and must complete a research license application (Appendix 1.3).

It is the responsibility of the researcher to understand their role and requirements for conducting research (Government of Yukon, 2016; Aurora Research Institute (ARI) 2019; NRI 2021) to ensure community awareness and collaboration, including which additional research permits/authorizations are required. There are ten additional permits that may be required to undertake a proposed research project if licensed by the NRI (Appendix 1.3), however majority of these additional permits focus on physical sciences research (Polidoro, 2022). To elaborate, social scientists investigating wildlife and their impact on cultural practices must also obtain a wildlife research permit as well as their respective NRI scientific license application (NRI, 2021). Research regarding parks, archaeology, or wildlife requires separate research licenses and is not tracked by the NRI itself (NRI, 2021; Polidoro et al., 2022; 2024). Additionally, research projects under the physical science

discipline must undergo separate screening by the Nunavut Impact Review Board (NIRB) (Appendix 1.3). NIRB screening for physical science projects ensures assessment of potential impacts prior to approval of the project from NRI officials (NIRB, n.d).

Once an application is received by the licensing manager at the NRI, the application is then shared with select research license review (RLR) organizations depending on the discipline of the application (See Figure 2.2). Managing the review process is a critical component to identifying key agencies potentially impacted or engaged in the proposed research, which is an ongoing challenge of research licensing in Nunavut (NRI, 2021). As a reviewer, it is their role to provide feedback, suggested changes, and provide community approval for a research license (Polidoro et al., 2024). The description of research license review organizations is further discussed in Chapters 2-4.

1.2.2 Licensing in Inuit Nunangat

Inuit Nunangat spans includes 4 regions in Canada's Arctic that spans across the country (Figure 1.3), including: Inuvialuit Settlement Region (Northwest Territories and a small portion of the Yukon); Nunavut; Nunavik (Northern Québec); and Nunatsiavut (Northern Labrador). Throughout these regions there are varying research licensing and review processes that must be explored to gain additional context and support my ongoing research.



Figure 1.3: Map of Inuit Nunangat (Indigenous Peoples Atlas of Canada, 2024)

1.2.2.1 Inuvialuit Settlement Region

A similar research licensing process to Nunavut is observed in the Northwest Territories via the Government of Northwest Territories (GNWT) Department of Education, culture, and employment. Reviewers in NWT (and Inuit Nunangat broadly) do not have the technical expertise of an academic researcher; therefore, it is essential for applicants to provide a plain language summary as part of their application (ARI, 2019). Once the application is completed and submitted online via the online research portal, the corresponding review organizations must comment on the application to address any comments, or concerns with the proposed research. The GNWT recommends at least three months' notice from submitting the application to the proposed data collection dates to

ensure reviewers have enough time to respond within their portal (ARI, 2019). It is important to note that the research licensing portal designed by the ARI exhibits the future goals of the NRI's Isirvik research portal, which aims to host research application and review functionalities in the future. Researchers are also required to pay a mandatory licensing fee of $200 (Government of Northwest Territories, 2025), where the NRI does not charge a fee to issue a research license application.

The GNWT administers scientific research licenses through their portal to online applications for research (POLAR) online system (Government of Northwest Territories, 2025). As per their guidelines for research, anyone interested in doing work in NWT must familiarize themselves with the current research landscape via their research database. Upon applying in the POLAR system, RLR organizations are notified and comment on review within the system directly, thus potentially reducing the administrative burdens on the licensing staff to liaise such feedback between parties (Beltrano et al., 2026; Polidoro et al., 2024).

1.2.2.2 Nunavik

Nunavik is currently in the process of developing their own research governance regime Atanniuvik. Their goals is to increase Inuit access to research information, while improving the current state of knowledge sharing and capacity building in the region (Atanniuvik, n,d). Atanniuvik will oversee the administration and approval of research permits (Polynya Consulting Group, 2022a). Atanniuvik is currently working in collaboration with the Geomatics and Cartographic Research Centre (GCRC) at Carleton University to develop an online application and review system and is working towards the

release of NORDvik (Nunavik's Own Research Database). Previously, the Nunavik research centre carried out their own research that directly responded to the needs of Nunavik Inuit (Makivik, 2021). Therefore, no information on a formal research license review process could be found. This allowed for complete control over their own research programs and ensured all stages of the research were culturally relevant (Makivik, 2021; Polidoro, 2022).

1.2.2.3 Nunatsiavut

Research in Nunatsiavut is governed by the Nunatsiavut Government Research Advisory Committee. Licenses are not administered by application, rather, granted approval from the committee itself. As part of the process, researchers must contact an Inuit research advisor within the region before proceeding with submitting the application itself (Nunatsiavut Research Centre, 2021; Polidoro, 2022). There is also a review process, where the Nunatsiavut Government Research Advisory Committee reviews all submitted applications before research can proceed. (Nunatsiavut Research Centre, 2021). Research licenses are administered manually through in-house staff and publish a research compendium of abstracts of research licenses authorized by the licensing agency for that year (Ortenzi et al., 2025).

1.2.3 International licensing

1.2.3.1 New Zealand

A Maori research framework is designed for researchers doing work in Aotearoa – the Native land of New Zealand (Came, 2013). The Te Ara Tika research framework incorporates elements of relationships, justice/equity, research design, and cultural/social

responsibility for those undertaking research with Maori peoples. The framework is grounded in the elements of whakapapa (relationships), mana (justice and equity), tika (research design) and manaakitanga (cultural and social responsibility), with a common theme of Maori involvement in the research (Came, 2013). In contrast, the NRI guidelines for researchers do not focus on Inuit-centered research approaches but rather require a technical project proposal like that of a federal research grant (NRI, 2025;21). A non-technical research proposal is also required as part of this process, however, is focused more on research objectives, methods for fieldwork, and results sharing.

A challenge with the current research license review process in Nunavut is the administration burden faced by communities who are given 45 days to review a NRI research license application (Holm et al., 2011; NRI, 2021; Polidoro et al., 2024; Ritsema et al., 2015). If the NRI does not hear back from a community after 45 days, then the research license automatically receives approval. This is a major challenge in the Nunavut research landscape, as research applications that are bound by institutional guidelines are often approved without community input. This gap is addressed in New Zealand through the Tika element of the Te ara Tika framework (Came, 2013), which addresses specific research design, Maori Participation, and relevance of research processes without limitations of a specific timeline. The framework goes beyond telling us what to do, but how to do it, and the best practice for it. The implementation guide is critical for researchers to understand how to do research with Maori in a correct way. It is also worth mentioning that some organizations in Nunavut have set out their own research guidelines, such as the Ittaq Heritage and Research Centre (Council of Canadian Academies (CCA), 2023),

however if an application is not reviewed by these organizations due to administrative burden or competing interests, then it would still become approved. A potential solution to this gap in the license review process in Nunavut could be revised guidelines that better suit the needs of Inuit, as addressed in the National Inuit Strategy on Research (ITK, 2018a), or the establishment of a research advisory committee in-house, which is also observed by Maori peoples to better oversee research activities in the country, or, to change the legislation of the Scientist's Act.

1.2.3.2 Greenland

The current research permitting process in Greenland is governed by the Minister of Domestic Affairs and does not require any kind of consultation with the population but rather focuses on potential safety concerns as the main priority of administering the permit (Holm et al., 2011). This limits the potential for communities to address social implications from research, which is an opportunity provided in the research review process in Nunavut (Polidoro et al., 2024). The literature does not address requirements of the permit application itself, however, it is noted that for many years, Greenland relied on an outsider approach to conduct research due to the lack of Institutional capacity and University presence to conduct research (Holm et al., 2011; Rink & Reimer., 2019). Often, researchers undertaking research in Greenland must follow Institutional guidelines from their home universities (Holm et al., 2011) which may have similar values but will not consider the unique ways of knowing experienced by Greenlanders themselves. Another challenge with the research permitting process in Greenland is that the same individual (science commissioner) is overseeing research in both Denmark and Greenland (Holm et al., 2011).

Unlike Nunavut Inuit who gained land claim rights during the creation of the Nunavut Land Claim Agreement (Cadman, Snook, & Bailey, 2022; Kuokkanen, 2020; McComber 2011; Perrin, Ljubicic, & Ogden, 2021), Inuit values were not discussed during the separation of Greenland from Denmark (Kuokkanen, 2020) thus removing an important aspect of Inuit rights in the regulations surrounding research in the country. To generate some control over research in Greenland, researchers have provided a toolkit for undertaking community-based participatory research in Greenland (Rink & Reimer, 2019) which provides guidelines from research design to dissemination to support researchers wishing to undertake projects in Greenland. The toolkit provides best practices for community-based participatory research, for example, through data collection, where Greenlanders would be responsible for collecting the data based on the skill at hand. The NRI guidelines for research do not provide toolkits for Inuit-specific research approaches, rather, ask for a letter of support from communities if available (NRI, 2021). The letter of support for a research project does not equate to community involvement in the research and removes Inuit from the research process. It would be important for the NRI to consider developing a toolkit as part of their guidelines for best practices to conduct research with Inuit.

1.2.3.3 United States of America

At the National level, the Indigenous Research Protection Act is established to protect the people, cultural, and natural resources of Native Tribes within the United States of America (USA). Through this act, Native tribes can exercise their right to approve or deny research proposals (Indigenous peoples council on biocolonialism n.d). The proposals are reviewed by a locally appointed research review committee, whereas in Nunavut, research

review organizations typically consist of pre-determined groups with additional administrative tasks, such as Hunters and Trappers Organizations, Hamlet Offices, or Regional Inuit Associations (Polidoro et al., 2024). The Act states that the research review committee has the right to ensure the protection of their individual rights and interests and must negotiate terms and conditions with the researcher directly (Indigenous peoples council on biocolonialism n.d). This is facilitated through a research agreement between the researcher and tribal community. This is not set out in the scientists' act, as it is the NRI's responsibility to broker the research relationships (NRI, 2021; Polidoro et al., 2024). For the research review committee, there is no defined timeline for returning feedback on the research proposal, unlike the 45-day requirement of the NRI (NRI, 2021), therefore the process for administering approvals is unclear. A final point of consideration for Indigenous research in the USA is the need for researchers to undertake local cultural sensitivity training within the Reservation (Indigenous peoples council on biocolonialism, n.d), this does not exist in Nunavut licensing requirements, and provides a valuable opportunity for researchers to fully understand cultural context, expectations, and discuss the project in-person (NRI, 2021). This is an opportunity that should be considered by the NRI as part of their research licensing approval process where all team members linked to a research license application should undergo cultural competency training. A limitation to this requirement is the cost associated with travelling to remote communities (Henri et al., 2020; Nilsen, 2005; Pigford et al., 2018; Snook, Cunsolo, & Dale, 2018), however it should be considered by researchers as part of their funding applications as Indigenous populations work towards self-determination in research.

Throughout the USA, there are numerous research requirements in place for each Native tribe because of self-government. As research priories vary across each tribe, we see local research requirements through the development of Northwest Portland area Indian health board (Bruhn, 2014), human research ethics boards in Navajo Nation in Arizona, and the Albuququerque Area southwest tribal epidemiological centre in New Mexico (Carroll et al., 2019). Each of these centres are led by "tribal peoples" and have a priority of data governance. The Nunavut Research Institute is not mandated to have a set of research priorities to carry out as per the Scientists Act, and information on research review organization priorities was not captured as part of the literature used in this examination. It would be valuable for the NRI to consider review organizations to share their list of guidelines to help gain Inuit control over research in the territory, and to support the administrative burden associated with review (Polidoro et al., 2024; Ritsema et al., 2015).

A final point of consideration for international research regulations is the establishment of a digital research database to better track, manage, and analyze research activities in a designated area (Polidoro et al., 2024). This is observed in Nunavut to address the administrative burden placed on communities who are sent research license applications. When comparing research regulations in Nunavut to international efforts, the NRI is the only agency administering a tangible research license that is stored in a research licensing database. This process could be adopted by tribes who prioritize data governance, like those in Oregon and New Mexico, through tracking their research approvals in a digital platform. This is an opportunity to track what research is being conducted, in what capacity, and can inform decisions related to funding and outcomes (CCA, 2023).

1.3 Research design

1.3.1 Positionality

I am a white woman of western European descent living in Cayuga, Ontario. Both my maternal and paternal grandparents are from Italy. I am closely connected to my heritage through the traditions of my ancestors. As a non-Indigenous researcher, I am aware that the teaching and learning opportunities I have had, are different than those of my northern research partners. In my undergraduate career, I was wired to derive conclusions from theories based on tangible evidence, which is drastically different than the Indigenous epistemologies of learning and life that I am exposed to in graduate studies. As a southern-based researcher, I recognize the colonial legacy of my European ancestors negatively impacted Inuit communities across Canada. I am aware my way of learning and thinking may vary between research collaborators, as the knowledge systems and ways of knowing within Inuit culture are different, and I was never exposed to such knowledge prior to pursuing graduate studies. I am constantly working towards increasing my understanding of Indigenous epistemologies so I can better myself as a collaborator in northern research. I recognize the privilege of undertaking graduate studies; therefore, I continuously reflect on the importance of ongoing engagement with the NRI and how their research licensing and administration staff would like to see the investigation of the community experiences with research license review.

1.3.2 Theoretical approach for community-engaged research

My thesis research is guided by Inuit concepts of community-engaged and partnered research, based on respect and reciprocity between researchers and community members

(Healey & Tagak, 2014; Ljubicic et al., 2021; Polidoro, 2022; Polidoro et al., 2024. My research involves joint decision-making in all phases of the project, from research design (Chapters 2.3.2.1; 3.2.1; 4.2.3) to dissemination, and is inspired by the Piliriqatigiinniq Partnership Model for Community Health Research (Figure 1.4) developed by Iqaluit-based Qaujigiartiit Health Research Centre (QHRC) (Healey & Tagak, 2014; QHRC, 2019). Their approach to community-led research emphasizes the importance of respectful research and acknowledging IQ and community priorities (QHRC, 2019), and aims to support meaningful community research in Nunavut through 4 Inuit concepts (Healey & Tagak, 2014; Polidoro, 2022; QHRC, 2026):

- Pittiarniq (being good or kind)
- Inuuqatigiinniq (being respectful of others)
- Unikkaaqatigiinniq (the power and meaning of storytelling)
- Iqqaumaqatigiinniq (when ideas or thoughts come into "one")

The Piliriqatigiinniq model represents "the web of relationships" (Healey & Tagak, 2014, p. 3) amongst researchers, youth, community members, and policymakers in community-based research. Each concept is based on aspects of Inuit life used to achieve wellness (Healey & Tagak, 2014), and are further described in connection to my thesis research below. Although this model targets health-related projects, it has been valuable in guiding my doctoral research approach in an effort to contribute to strengthening Inuit capacity in research (QHRC, 2026). Within my doctoral research, it is important to emphasize that the primary form of "community" engagement I have implemented is through a close research partnership with the NRI. The NRI has worked to co-develop

and guide each phase of my research. I have also engaged Nunavummiut in various communities in seeking additional guidance in research design (e.g. representatives of QHRC, NTI, and Aqqiumavvik helped to inform question development, review of thematic coding). Inviting RLR organization representatives to the workshop also created opportunities for collaborative analysis. In addition, key outcomes of this project have informed broader engagement with review organizations, for example, through plain language summary reports, community presentations, and informal conversations. Overall, this model illustrates the need for respectful relationships and meaningful engagement between researchers, Inuit organizations, and community members.

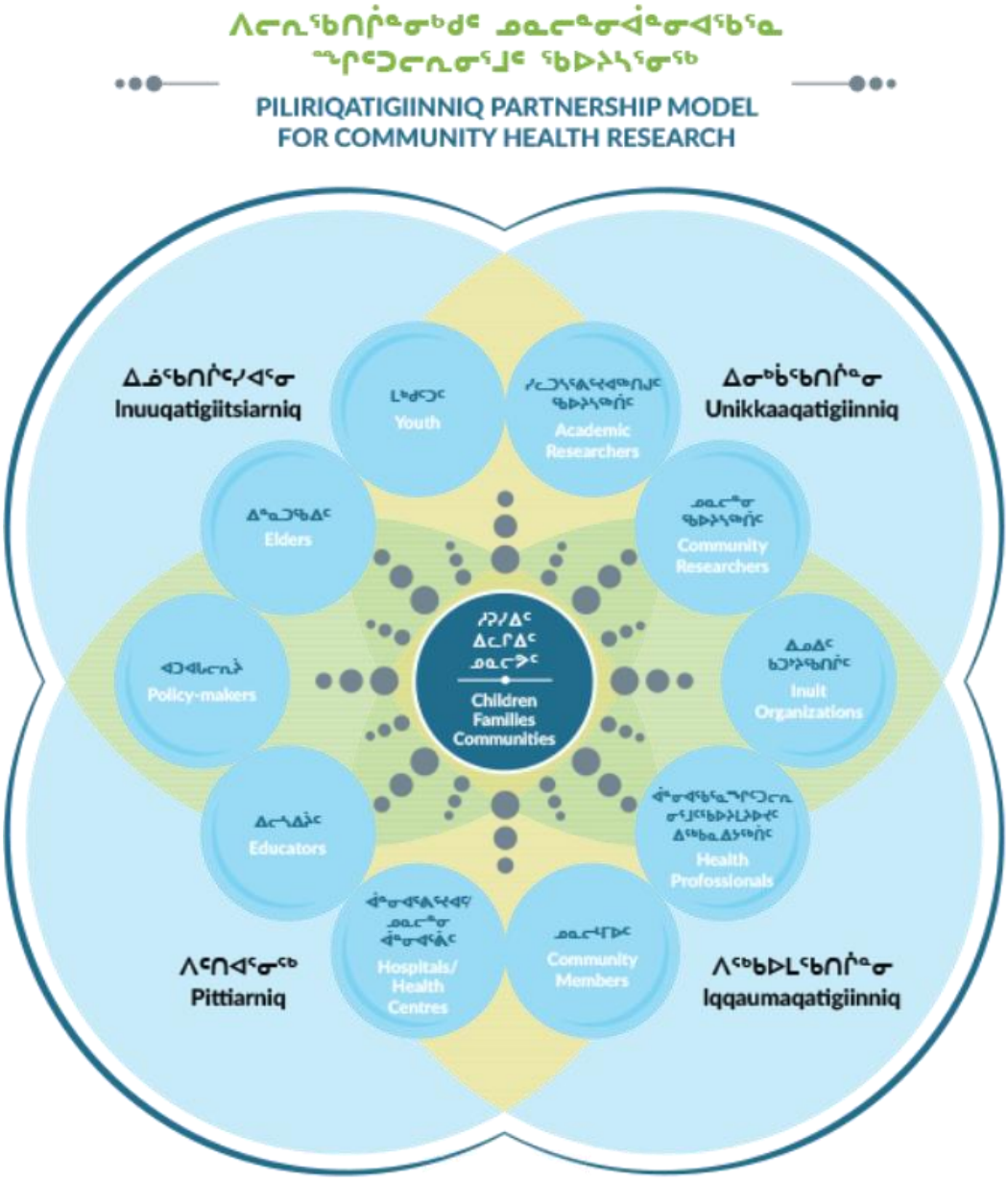


Figure 1.4: The Qaujigiartiit Health Research Centre's Piliriqatigiinniq Partnership Model for Community Health Research (QHRC 2019)

1.3.2.1 Pittiarniq (being good or kind)

This concept is connected to the emergence of research ethics recognizing the importance of consent, protection of stories, and accountability when executing research with Indigenous communities (Healey & Tagak, 2014). In northern-based research, it is important to understand Inuit values and how they contribute to meaningful research relationships (ITK, 2018; ITK & NRI, 2007). Although "being good" is described as subjective (Healey & Tagak, 2014), it is important for researchers to understand Inuit research ethics and collaboration, whether it is through literature, conversation, or graduate coursework. In following this model, my approach evolved through iterative discussions with the NRI, my supervisor and research team at McMaster, as well as collaborators at Carleton, QHRC, and in Nunavut organizations. For example, learning about Pittiarniq informed my ethical practice. I sought guidance on Pittiarniq to understand ethics according to Inuit values. I fostered this process by co-developing survey questions, interview guides, workshop agenda, and research ethics applications with project partners and members of Dr. Ljubicic's research team.

1.3.2.2 Inuuqatigiinniq (being respectful of others)

Building positive relationships between researchers and community members is the heart of meaningful engagement (Healey & Tagak, 2014; ITK, 2018; ITK & NRI, 2007). This concept encourages researcher reflexivity, prompting researchers to continuously ask themselves why they are doing the research (Healey & Tagak, 2014). I utilized Inuuqatigiinniq throughout the planning stages of my research as it encouraged self-reflection on my motivations, and transparency between myself and all involved. I

will continue to seek guidance from Inuit partners about what respectful research means in an Inuit cultural context (Healey & Tagak, 2014). I have fostered Inuuqatigiinniq throughout my doctoral thesis, as Jamal has collaboratively guided each phase of my research.

1.3.2.3 Unikkaaqatigiinniq (the power and meaning of storytelling)

Storytelling is an important component of Inuit culture (Healey & Tagak, 2014, Martin, 2009; Stewart et al., 2000; Wisniewski, 2008). For generations, Inuit have exchanged knowledge about history, life, values, and morals through storytelling (Healey & Tagak, 2014). The use of stories provides a process of decision-making derived from the spoken experiences of survival and wellbeing (McGregor et al., 2010). It is critical for researchers to understand the meaning of storytelling and how these knowledge practices can be incorporated into community-based research. Unikkaaqatigiinniq encompasses the importance of telling a story in one's research rather than simply presenting the data. I applied Unikkaaqatigiinniq by learning the stories of RLR organizations through interviews and workshops. During interviews, reviewers discussed experiences with licensing review, including interactions with researchers and the NRI. Furthermore, in the collaborative analysis workshop, RLR organization representatives had the opportunity to share ideas with each other, support each other's comments, and build on shared experiences with the RLR process in Nunavut.

1.3.2.4 Iqqaumaqatigiinniq (when ideas or thoughts come into "one")

This concept refers to data analysis as a means of connecting results to the research question itself (Healey & Tagak, 2014). Researchers will often "immerse" themselves in

their data and reflect on the results, discussing with their research partners and collaborators (Healey & Tagak, 2014). This synthesis of ideas challenges researchers in "finding meaning and understanding" (Healey & Tagak, 2014, p. 8) of the data collected and how it will benefit Nunavummiut and their research partners. For my thesis, I enacted Iqqaumaqatiginniq when engaging in collaborative analysis with my project partners and through the workshop conducted as part of this research. I provided a synthesis of key themes emerging from survey and interview results with NRI through iterative online and in-person meetings we will work to identify the ways that the research review process can be improved to make research better address community priorities. Additionally, during the workshop, I also shared my results broadly with research license review organizations, fostering an opportunity to confirm results and synthesize varying perspectives from the research license review process in Nunavut.

1.4 Thesis structure and contents

My doctoral dissertation is structured as three journal articles, each represented in one of the following chapters.

1.4.1 Chapter 2

Beltrano, A., Owen, J., Carter, N., Perrin, A., Shirley, G., & Ljubicic, G. (2026). **Insights into community experiences with research license review across Nunavut**. Arctic, 78(3). https://doi.org/10.14430/arctic83527. [This article is currently IN PRESS and undergoing final copyedits ahead of final publication].

The purpose of chapter 2 is to introduce the concept of RLR, organizations involved in review of NRI applications, and the history of reviewer burden based on an analysis of

research trends in Nunavut. This paper is the first of three phases and serves as a baseline investigation of community experiences with RLR in Nunavut. To better understand such experiences, an online survey was undertaken to learn more about i) the annual volume of RLR requests; ii) their review protocols and practices; iii) opportunities and challenges associated with RLR; and iv) recommendations for improving NRI's consultation process. There were 20 representatives who completed the survey. Survey results identified RLR organizations receive up anywhere from one to 64 applications on an annual basis. Over half (55%) of RLR organizations review all applications received,, and some (35%) reviewers are financially compensated for reviewing. Only 10% of reviewers provide feedback for all applications reviewed. Reviewers reported a need for improved engagement with researchers, including access to research results. This study is the first time RLR organizations were ever consulted regarding their experiences with RLR in Nunavut and helped set the tone for understanding the volume of review requests received, opportunities and challenges associated with RLR, review protocols and practices, and recommendations for improving the NRI's consultation process.

1.4.2 Chapter 3

Beltrano, A., Owen, J., Carter, C., Shirley, S., & Ljubicic, G. (2026). **Is Research License Review Meeting Expectations? Informed perspectives from Nunavut review committee experiences**. [Submitted to the Canadian Journal of Research, Society, and Development and is currently under review].

The second paper of this dissertation introduces the three main goals of research licensing, which are to 1) minimize harm and disruption to Nunavut's people and

environment; 2) track and document research activities in and about Nunavut; and 3) facilitate consultation and engagement with communities. Chapter 3 expands survey results from Chapter 2 and furthers our understanding of community experiences with RLR via 16 semi-structured interviews, conducted online, in-person, and telephone. The goals of the interviews were to gain deeper insights into i) priorities and concerns related to research, ii) challenges with review, iii) opportunities to improve review processes, and iv) research reporting. Interviews reveal a need for increased training and funding to help facilitate community engagement in the review process. Additionally, there are ongoing barriers and challenges to reviewing applications, such as staffing shortages, time of year, and competing interests. Review organizations identify opportunities for more guidance from NRI to support organizational RLR processes. Last, the need for streamlined research reporting systems is discussed. Ultimately, this paper discusses whether licensing is meeting its three goals, and opportunities to help put recommendations into practice.

1.4.3 Chapter 4

Beltrano, A., Carter, N., Shirley, J., Owen, J, & Ljubicic, G. **Lessons learned from understanding community experiences in the research license review process in Nunavut, Canada**. [Manuscript to be submitted to the journal Canadian Geographies in Spring 2026].

Chapter 4 discusses the third and final data collection piece of this project. The chapter introduces a brief overview of the project, followed by a background on the history of challenges related to RLR, and what has been done to address those challenges. The

purpose of this paper was to bring together RLR organizations for the first collaborative analysis workshop to synthesize ideas, recommendations, and experiences regarding RLR in Nunavut. The World Café -style workshop was held in Ottawa, ON, and included 12 representatives from across Nunavut. The goals of the workshop were to discuss: i) criteria used by RLR organizations to review applications; ii) how RLR organizations would like to receive research results (from researchers), and iii) Understand the types of support needed by both licensing agencies and researchers to support RLR organizations in their review processes. The workshop revealed that review criteria vary. Across Nunavut, RLR organizations prefer community-based and in-person forms of knowledge mobilization. Support needed from licensing agencies identified my RLR organizations includes funding and training for organizational capacity. Lastly, RLR organizations want to see more opportunities for community engagement from researchers. This chapter discusses findings with the importance of enhancing RLR processes to support evidence-based decision-making and Inuit research governance.

1.4.4 Chapter 5

This is the final chapter of the dissertation, which provides a synthesis of key research findings, across all three papers, and a cross-cutting analysis of emerging themes. Through the conclusion, I identify several recommendations for next steps to consider for research licensing to better address Nunavummiut priorities. The conclusion also reflects on the importance of this work in contributing to efforts to develop a Nunavut-specific approach to implementing the National Inuit Strategy on Research (ITK, 2018a), ultimately aiming to contribute to Inuit self-determination in research.

CHAPTER 2

INSIGHTS INTO COMMUNITY EXPERIENCES WITH RESEARCH LICENSE REVIEW ACROSS NUNAVUT

2.1 Introduction

For many decades, northern Indigenous Peoples have been ignored or inadequately involved in the consultation and engagement processes related to research due to colonial legacies of research throughout Inuit Nunangat (Inuit homelands in the Canadian Arctic) (Government of Canada, 2016; ITK, 2018a; MacDonald, 2018; Carter et al., 2019; Polidoro et al., 2024). Historically, researchers used institutional and public funding to conduct curiosity-driven research on Inuit and often ignored Inuit knowledge systems and methodological research approaches (Castleden et al., 2012; Healey & Tagak, 2014). Inuit endured an imbalance in power dynamics, and colonial policies limited their ability to govern research activities in their homelands and address their own questions (ITK, 2018a; Polidoro et al., 2024).

Initial efforts to monitor research and ensure it would do no harm began in 1984, when the Government of the Northwest Territories adopted research licensing. In 1995, the research licensing division of this territorial government merged with Nunavut Arctic College, creating the Nunavut Research Institute (NRI) (Polidoro et al., 2024; NRI, 2025). Additional Inuit efforts to regain control over western scientific research began with Nunavut land claims negotiations, continuing through implementation, which recognized Inuit decision-making authority about research on their land (Nunavut Land Claims

Agreement Act S.C, c. 29, 1993). With the Nunavut Agreement, co-management institutions (i.e., Nunavut Wildlife Management Board) and institutions of public government (e.g., Nunavut Planning Commission, Nunavut Impact Review Board, Nunavut Water Board) were established and involved in research regulatory regimes. They assess all land- and water-based research in the Territory before projects can proceed (NWMB, n.d). Research undertaken on Inuit-owned lands must first be approved by designated Inuit organizations (Nunavut Tunngavik Incorporate, Qikiqtani Inuit Association, Kivalliq Inuit Association, and Kitikmeot Inuit Association) (Government of Nunavut, 2003). All research is also subject to licensing under one or more territorial acts, such as the Scientists Act and the Wildlife Act, alongside federal legislation like the Fisheries Act (among others) pre-dating the Nunavut Agreement (Fisheries Act, RSC 1985, CF-14; Nunavut Act, SC 1988, c.S-4; Wildlife Act, SNu 2003, c26).

The agencies authorizing and licensing research in Nunavut and throughout Inuit Nunangat all undertake some form of consultation with northern communities, Inuit rightsholders, and other stakeholders prior to approving a research request. Although consultation measures vary across authorizing agencies, all aim to provide northern communities with some degree of direct influence in decision-making processes (Scientists Act, 2011; GTC, 2011; Aurora Research Institute, 2019; Cadman, Snook, & Bailey, 2022; Nunavut Research Institute (NRI), 2021; Polidoro et al., 2024). This consultation process, referred to as research license review (RLR), aims to increase community awareness and decision-making ability over research. It provides opportunities for community organizations (e.g., municipal government, hunters and trappers organizations, community

research organizations) to raise questions, share concerns, and recommend to licensing authorities whether or not projects are approved (or not). Research approval is granted following a successful evaluation of project relevance, community engagement, and potential risks and benefits (Lavoie et al., 2022). Through community consultation, licensing authorities gain important input from organizations in a joint effort to reduce physical or social harm in communities where research takes place (Scientists Act, SC 1988; NRI, 2021). However, some Inuit organizations have raised concerns about RLR. This suggests that northern research licensing, including consultation measures, should be revisited to better support Inuit, among other northern Indigenous Peoples (ITK [Inuit Tapiriit Kanatami], 2018a; CCA [Council of Canadian Academies], 2023).

The NRI is responsible for administering scientific research licenses under the Scientists Act (NRI, 2021; Polidoro et al., 2024). Research licensing ensures research activities do not harm physical or social environments in Nunavut (NIR, 2025; Polidoro et al., 2024). The Scientists Act applies only to physical and social Inuit Qaujimajatuqangit (IQ), and health science research conducted in, or related to, Nunavut. These areas of inquiry comprise approximately 60% of research happening in Nunavut (Polidoro et al., 2024). Research involving wildlife, fish, species at risk, migratory birds, national parks, wildlife areas, archaeology/paleontology, and access to Inuit-owned lands is not licensable under the Scientists Act and requires separate licenses or permits administered by other federal or territorial government departments (NRI, 2021; Polidoro et al., 2022, 2024). In administering scientific research licenses, the NRI facilitates a RLR process involving direct consultation with community and regional organizations that could be most

significantly impacted by proposed research, including Nunavut Tunngavik Incorporated, the Government of Nunavut, Hunters and Trappers Organizations and Associations (HTO/HTA), and local Hamlet offices. Therefore, community organizations that receive licenses to review vary on a case-by-case basis according to the proposed research.

Analyses of research trends in Nunavut (Polidoro et al., 2022, 2024) have revealed an exceptionally high volume of RLR requests going to High Arctic communities, such as Resolute Bay and Grise Fiord (Polidoro et al., 2022). These small communities are frequently requested for RLR occurring across High Arctic islands, as they are in closest proximity to remote field research. To date, no research has investigated community experiences of RLR requests, or potential impacts of a high volume of requests on community organizations' ability to provide meaningful feedback on projects occurring in their homelands. Therefore, we undertook a survey to learn about community organizations' experiences with RLR in Nunavut. Survey responses provide insights into: i) the volume of research license review requests received by RLR organizations across Nunavut; ii) different approaches to RLR organizations' structures and responsibilities in reviewing research license applications; iii) ways to improve community interactions with the NRI in the licensing review process; and, iv) community perspectives on opportunities and challenges associated with RLR processes. We aim to enhance understanding of RLR processes and community research priorities to better serve the interests of the NRI, review organizations, researchers, and Nunavummiut.

2.2 Background on Research License Review in Nunavut

Researchers planning for research in Nunavut can submit a research license application at any time of year; however, they must allow for a 45-day review period (NRI, 2021). A complete application requires proof of prior engagement with communities involved or impacted by the proposed research, plain language project summaries in both English and Inuktut (Inuit language), and specific details that vary according to the research discipline (NRI, 2021; Polidoro, 2022; Polidoro et al., 2024). Additional approvals and authorizations may need to be attached, such as proof of a Nunavut Impact Review Board screening, institutional ethics clearance certificates, and field site coordinates, among others (NRI, 2021; Polidoro et al., 2024).

When the NRI receives an application for a scientific research license, regardless of discipline, the licensing manager confirms application completeness and compliance with relevant regulations and guidelines. The manager liaises with the applicant as needed, then circulates the application to the appropriate community and regional RLR organizations based on the nature, location, and discipline of the research. For example, proposals involving health research are distributed to Nunavut Tunngavik Incorporated, the Government of Nunavut Department of Health, and the Qaujigiartiit Health Research Centre, while proposals focusing on social sciences or IQ research are sent to the local Hamlet office, HTO, community research organization (CRO), or Government of Nunavut Department of Education (if taking place in a school). Land- and water-based (physical or natural science) license applications must undergo review by the Nunavut Planning Commission and are then subject to further screening and approvals from various

institutions of public government (e.g., Nunavut Impact Review Board, Nunavut Wildlife Management Board, Nunavut Water Board) prior to obtaining an NRI license (NRI, 2021).

As part of RLR, applications are expected to be thoroughly reviewed by individuals with appropriate expertise and knowledge to provide meaningful feedback. RLR organizations "may also recommend terms and conditions [for a research license] to mitigate potential impacts" of proposed research (NRI, 2021:22). A recent review of research trends in Nunavut (Polidoro et al., 2024) identified a high intensity of review requests circulated to Hamlet offices and HTO/HTAs. This has caused some scholars and others to highlight a concern about the potential review burden faced in Nunavut communities, where research capacity limitations and high staff turnover rates are common (Pigford et al., 2018; Polidoro et al., 2024). Tracking reviewer comments and feedback also poses logistical challenges, particularly when multiple organizations are involved in a review. Establishing a standardized system for tracking review comments and ensuring they are addressed is essential for maintaining transparency and accountability in research (Gearheard & Shirley, 2007; Marley, 2019; Native American Centre for Excellence Substance Abuse Program, n.d).

Since 2019, the NRI has partnered with Nunavut Tunngavik Incorporated, the Qaujigiartiit Health Research Centre, and McMaster and Carleton Universities to investigate research trends in Nunavut (Polidoro et al., 2024) and redesign their administrative licensing database, called Isirvik (meaning "an entrance" in Inuktitut). The Isirvik research portal (released in December 2023) is the first public digital and searchable online repository of research licensing information in Nunavut. Isirvik.ca enables

community members, researchers, and decision makers, among others, to identify who is leading research in Nunavut, in what locations, on what topics, using which methods and reporting mechanisms (Polidoro et al., 2024). Although currently Isirvik's focus is making research licensing data available, work is ongoing to develop mobile functionality and possibilities of portal enhancement, including integration of research license application, reporting, and review interfaces.

Our efforts to learn about Nunavut RLR experiences provide unique opportunities for RLR organizations to collectively identify strategies for administrative and operational improvement. Gathering this feedback can inform decision making about a potential legislative review of the Nunavut Scientists Act. It can also inform new approaches to facilitating RLR and the refinement of Isirvik, while highlighting key opportunities for researchers, RLR organizations, and the NRI to align research with Inuit priorities. Our work also complements initiatives underway to develop a Nunavut-specific vision for implementation of the National Inuit Strategy on Research (NISR), which aims to enhance Inuit self-determination in research (ITK, 2018a).

2.3 Methods

2.3.1 Licensing Review Data

License review requests are tracked by the NRI as it shares research license applications with review organizations. Since 2004 this information has been stored digitally in the NRI's internal Microsoft Access database, and was recently transferred to Isirvik (Polidoro et al., 2024). First author Beltrano (formerly Polidoro) supported the NRI

with importing and cross-checking all research licensing information for accuracy and completeness as part of their Master's thesis (Polidoro, 2022; Polidoro et al., 2024). Cross-checking was done by comparing database entries with original license materials provided by the NRI (i.e., full license applications, reports, and annual research compendia), and making corrections where information was truncated or missing (Polidoro et al., 2024). Database entries were also edited by the first author to correct spelling mistakes and standardize formatting (e.g., organization names, affiliations, locations, etc.) (Huxley, 2020). Isirvik data was exported to an Excel file used to conduct descriptive statistical analysis and identify trends (Loeb et al., 2017) in RLR requests. Frequency counts of review requests by the NRI to RLR organizations were applied and analyzed by organization type, year, and community (including Bathurst Inlet and Umingmaktok, although no longer officially recognized communities; see Polidoro et al., 2024). Descriptive statistics were collaboratively analyzed by all authors and disseminated broadly via one Nunavut-wide and 25 community-specific research trends reports (Polidoro et al., 2022). Some licenses were missing relevant RLR information and thus were omitted from the analysis.

2.3.2 Survey of Community Review Experiences

2.3.2.1 Survey Co-development

We chose to conduct a survey to follow up on our initial research trends analysis, as a useful method to gain a broad range of feedback from RLR organizations, and to inform the development of interview questions for more in-depth discussions (Ponto, 2015;

Taherdoost, 2022). The survey was co-developed with project partners (NRI, McMaster University, Qaujigiartiit Health Research Centre, Aqqiumavvik Arviat Wellness Society, Nunavut Tunngavik Incorporated, and Carleton University) to align objectives and questions with NRI and Inuit priorities. In summer 2022, as part of their PhD research, Beltrano drafted, refined, and finalized questions base on an iterative review and feedback from all authors. Initially, Beltrano drafted the first iteration of the survey in late summer 2022, and discussed with author Shirley over a few weeks, refining the draft. Once questions were updated, feedback was also incorporated from project partners for additional consideration. In Fall 2022, all feedback was compiled, and questions were finalized in person with the remaining co-authors. To keep survey length reasonable and yield strong response rates (Coughlan et al., 2009), the final questionnaire included 19 of the most pertinent questions. Questions were organized into thematic sections for clarity and flow (Bree & Gallagher, 2016), including: i) RLR organization details; ii) RLR, including processes and protocols; iii) communications with the NRI; and, iv) opportunities and challenges. We used clear, plain language and non-leading open and closed-ended questions. Response options included both Likert (5-point scale from strongly disagree to strongly agree) and multiple choice (a list of options to select from). The survey also included 5 open-ended questions enabling respondents to elaborate on their RLR experiences and provide more context.

2.3.2.2 Survey Instrument

We chose Qualtrics software for ease of connecting with a broad audience across Nunavut (Cushman et al., 2017). We also selected Qualtrics for its Canadian servers, which

are important for ethical protocols and privacy assurances. For 6 survey questions we used display logic, where questions appear conditionally based on subsequent responses, and for three questions we used skip logic, which sends respondents to a future point in the survey based on subsequent response (Qualtrics, 2025a, b). We displayed only relevant questions to make completing the questionnaire as time efficient as possible for respondents (University of Wisconsin-Whitewater n.d) and to relieve the burden of answering questions not considered relevant. We distributed the online survey in English with a reuseable, anonymous link. Given the slow, unreliable, and often prohibitively expensive internet service in Nunavut (Arctic Council Secretariat, 2017), we provided survey options, including a fillable PDF document and telephone or video call-based interviews (Ponto, 2015). Participants could complete the survey in English or Inuktut and return the survey by email or fax. Translated surveys were available in Inuktitut or Inuinnaqtun (depending on the Inuktut dialect used in the reviewing organization's community).

2.3.2.3 Survey Recruitment

We used a purposive sampling strategy to obtain results from a target group (Etikan et al., 2015; Palinkas et al., 2015) of 60 organizations who are currently and regularly involved in Nunavut scientific license review, including: Hamlets, HTO/HTAs, the Government of Nunavut departments of Education and Environment, Inuit organizations (Nunavut Tunngavik Incorporated and all three regional Inuit Associations), community-based research organizations (e.g., Qaujigiartiit Health Research Centre, Kitikmeot Heritage Society, Aqqiumavvik Arviat Wellness Society), and institutions of public

government (e.g., Nunavut Wildlife Management Board) (Figure 2.2). Multiple phases of recruitment included initial invitation emails, follow-up emails, and telephone calls (Figure 2.3). Data collection took place over 7 months (November 2022 to June 2023). Of the 60 RLR organizations invited to complete the survey, 20 questionnaires were received from representatives of 17 organizations. Majority of respondents (n=6) represented a Nunavut-based charity/Non-governmental organization (Figure 2.1) Of the 20 questionnaires, 10 came from the Qikiqtani Region and 5 in Kitikmeot and Kivalliq Regions, respectively. Most surveys (60%) were completed by one person (as opposed to a group response), and none discussed their responses with others in their organization. Among those invited to participate in the survey (referred to as participants), the 20 individuals who completed the survey are referred to as respondents throughout the paper (Carter et al., 2023). Ten additional surveys were started but not completed and were omitted from our analysis to avoid skewing results. 2 organizations submitted multiple responses (from 2 and different individuals, respectively). Data were anonymized according to participant preference, as indicated in their consent responses (see Appendices 2.1;2.2).



Figure 2.1: Distribution of affiliation type for survey respondents

2.3.2.4 Survey Response Rate

When conducting surveys, low response rate is a common challenge, and a 30% response rate is generally anticipated (Burgard et al., 2020). Our response rate was particularly impacted by difficulties following up with participants resulting from participants' duty travel, staff shortages, as well as time of year, and inclement weather resulting in office closures (McComber, 2010; Polidoro et al., 2024). We also followed up multiple times with invited participants who did not respond (Coughlan et al., 2009).

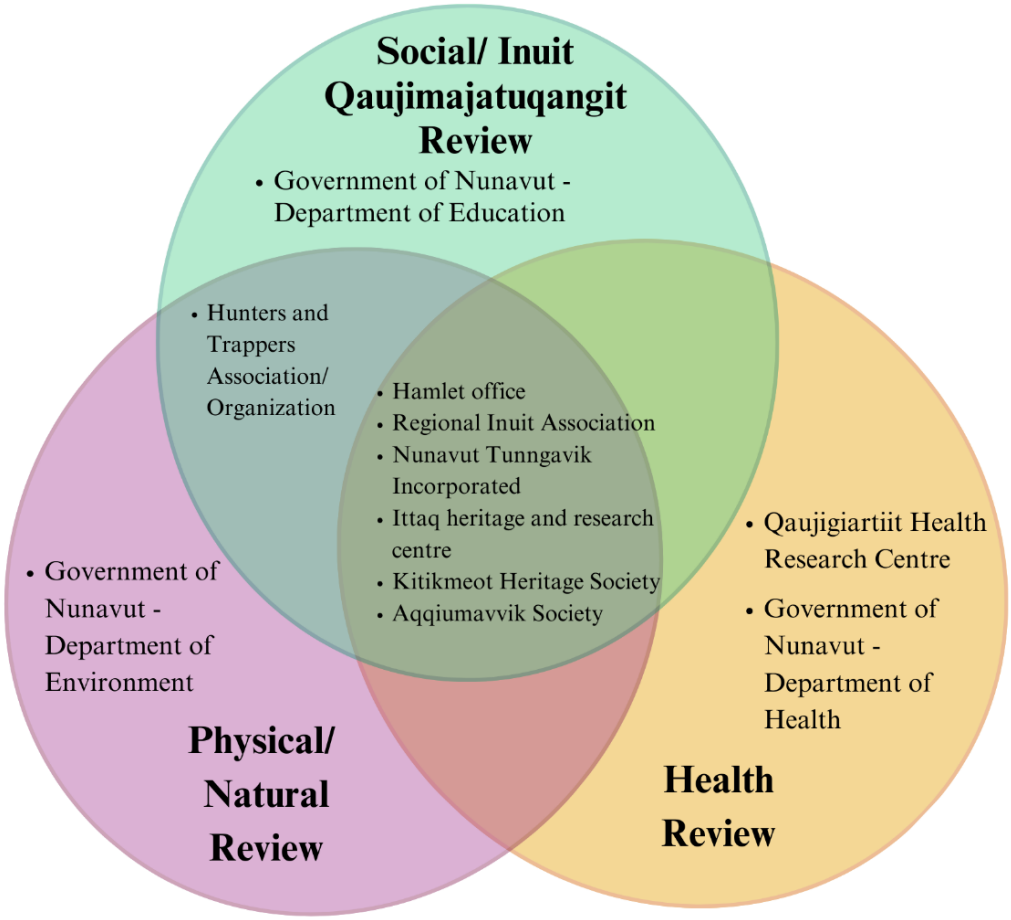


Figure 2.2: List of organizations that review applications to conduct research in Nunavut. Where: These organizations review particular disciplines of research, including those in the physical and natural sciences, health, and social and Inuit Qaujimajatuqangit.

2.3.3 Data Analysis

2.3.3.1 Descriptive Statistics

To analyze RLR requests by year, community, and organization, Isirvik data was exported into CSV format for use in Excel. Data were compiled and visualized with

descriptive statistics and graphs (frequency counts and percentages) to represent findings (Polidoro et al., 2024). To analyze RLR experiences, survey responses were exported from Qualtrics into CSV format for use in Excel. We used descriptive statistics (measures of central tendency and dispersion) to analyze responses from closed-ended questions (multiple choice and Likert-scale) and developed summary figures representing proportions (bar and pie charts).

2.3.3.2 Thematic Analysis

Thematic analysis involves identifying themes within text (Dunn, 2010; Friese et al., 2018). Open-ended survey responses were exported into Excel, where similar responses were grouped manually based on themes identified within interview responses. As the number of responses was relatively small (n=20) and open-ended questions were limited, a formal coding structure was not applied. Rather, themes were identified directly from survey responses by grouping responses focused on common themes. For example, responses to a question about requesting terms and conditions on a research license were grouped into themes based on compensation and improved communication. Canva online graphic design software was used to visually represent thematic groupings. Thematic analysis supported identification of emerging themes and contributed to our baseline understanding of RLR experiences (Bree & Gallagher, 2016).

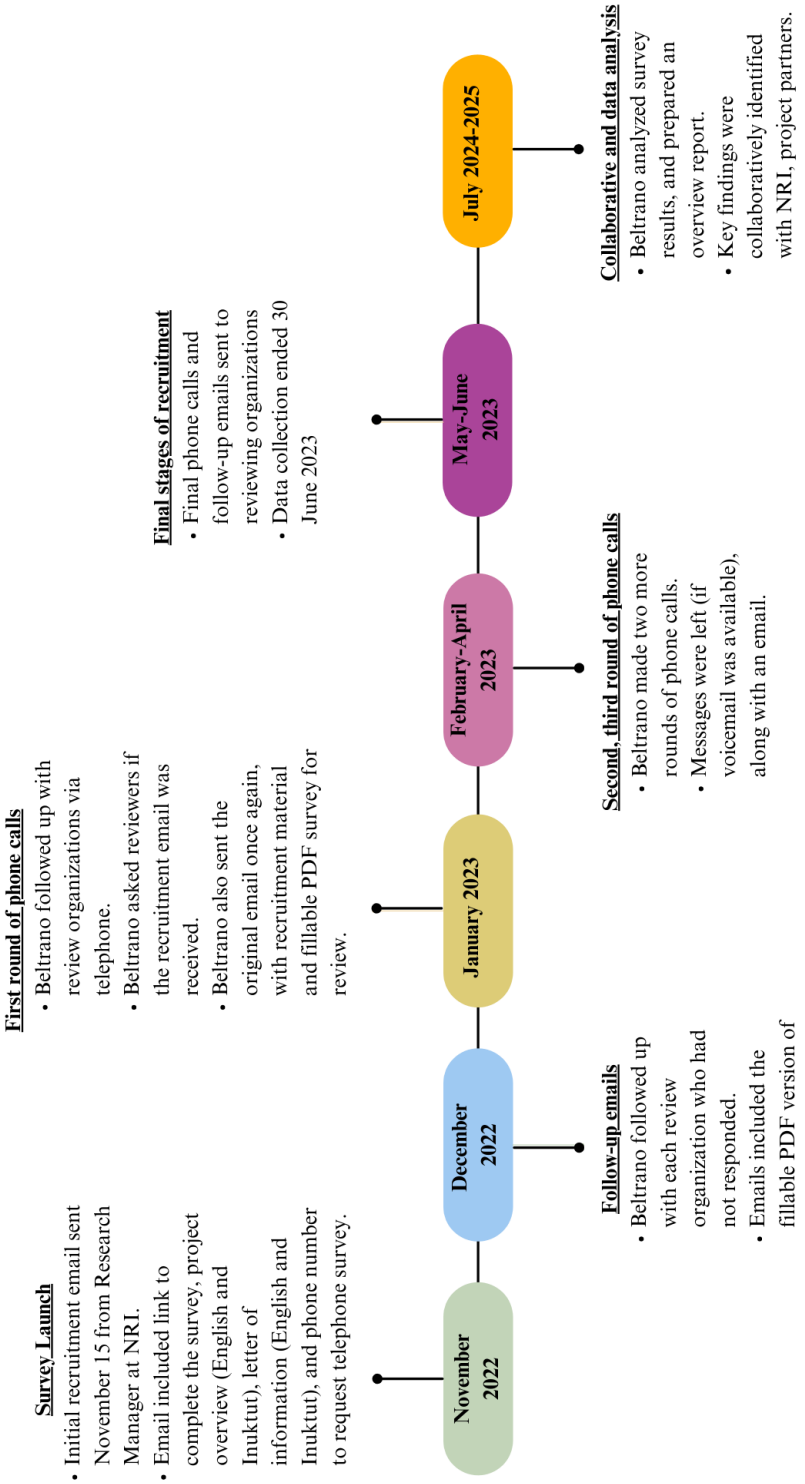


Figure 2.3: Survey implementation timeline.

2.4 Results

2.4.1 Research License Review Requests

From 2004 to 2019 there were 17,968 RLR requests and 2132 licenses (with RLR information available) issued across 10 different types of RLR organizations. The total number of review requests ranged from 1 – 64 per license issued. On average, this is 8.43 reviews per license issued (i.e., 8 organizations are invited to review each license application). One research project can occur in multiple communities, and therefore can require multiple reviews (Polidoro et al., 2024). Research occurring in one community can also require review from multiple local organizations (i.e., the Hamlet office, HTO/HTAs, and the Regional Inuit Association, at minimum). Hamlet offices, including the City of Iqaluit, received the highest number of review requests (n=5299), followed by institutions of public government (n=3693), HTOs (n=2642), regional Inuit Associations (n=1909), Nunavut Tunngavik Incorporated (n=1796), and the Government of Canada (n=1530) (Figure 2.4). The Government of Nunavut received some of the fewest review requests (n=470), followed by non-government organizations (Nunavut-based and non-Nunavut-based, within Canada) (n=418), and District Education Authorities (n=207). Nunavut Arctic College received the least number of review requests (n=4) (Figure 2.4).

Out of the total 1909 review requests sent to regional Inuit Associations, the Qikiqtani Inuit Association received the majority (n=1212). The Kitikmeot and Kivalliq Inuit Associations received 372 and 325 review requests, respectively (Figure 2.4).

The City of Iqaluit received more (10.95%) RLR requests than any other review organization. Out of review requests sent to the city and other Hamlet offices (n=5299), the next largest number went to: Resolute Bay (9.62%), Grise Fiord (7.51%), Cambridge Bay (6.91%), and Pond Inlet (4.79%). Coral Harbour (2.09%), Sanikiluaq (1.76%), and Whale Cove (1.43%) received the fewest RLR requests (Figure 2.6). The volume of review requests received by Hamlets fluctuated over the 16-year period (Figure 2.7), with the lowest number of RLR received in 2006 (n=257) and the most in 2008 (n=428) (Figure 2.7).

Resolute Bay HTA (16.61%) and Grise Fiord (Iviq) HTO (11.98%) received the highest number of requests among HTO/HTAs, followed by Cambridge Bay (Ekaluktutiak) (9.30%), Iqaluit (Amaruq) (7.63%), and Pond Inlet (Mittimatalik) (4.96%). The Whale Cove (Issatik) HTO (1.18%), Bathurst Inlet (Burnside), and Umingmaktok (Omingmaktok) HTA received the least review requests (Figure 2.8). Review requests received by HTO/HTAs increased until 2009 (n=272), then declined to the fewest RLR requests in a year in 2016 (n=97) (Figure 2.9).

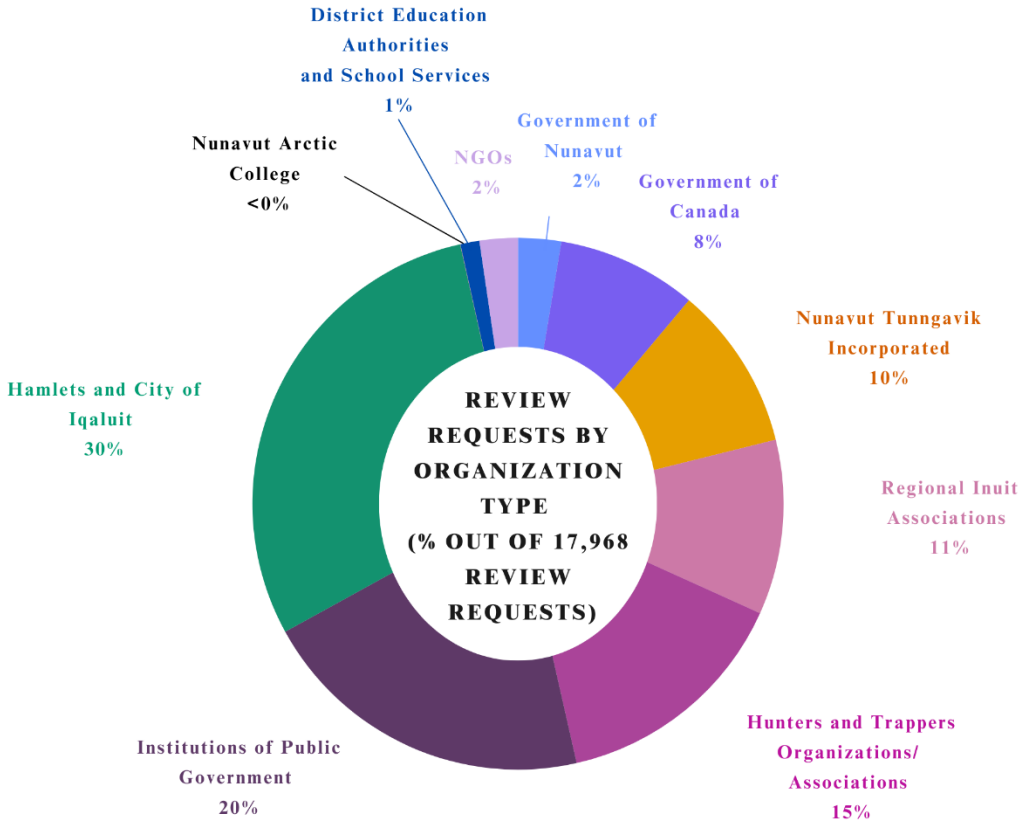


Figure 2.4: Distribution of Nunavut Research Institute research license review requests (sent to reviewing organizations 2004 – 19), from Polidoro et al., 2022

2.4.2 Research License Reviewer Experiences

2.4.2.1 License Review Volume

8 respondents indicated that their organization reviews between one and 10 applications annually, 4 reviewed 21 – 40 requests, two reviewed 41 – 60 requests, and one reviewed 11 – 20 requests. 5 respondents did "not know" how many applications their organization receives each year (Figure 2.10).

Most respondents (55%; n=11) review all research license applications received from the NRI (Figure 2.11). Of those who review only a proportion of applications received, 5 said they review "some" (1 – 39%) and two said they review "most" (61 – 99%) of applications received. 1 respondent indicated that their organization reviews "about half" of research license applications received, while one participant "did not know" what proportion are reviewed (Figure 2.11). Time constraints (n=6 respondents) and prioritization of climate change – related applications (n=2 respondents) were the reasons given for why they are selective in license review.

Respondents identified two main factors impeding their ability to review license applications, including: time of year and capacity limitations due to other responsibilities. "We always get slammed in the spring when researchers want to come for the warm summer months. We never get slammed in November," said one representative from a CRO. Another said, "balancing the time needed to review with other priorities [makes it hard to review license applications]." Two respondents did not answer this question. 8 respondents did not elaborate on why they did not review licenses.

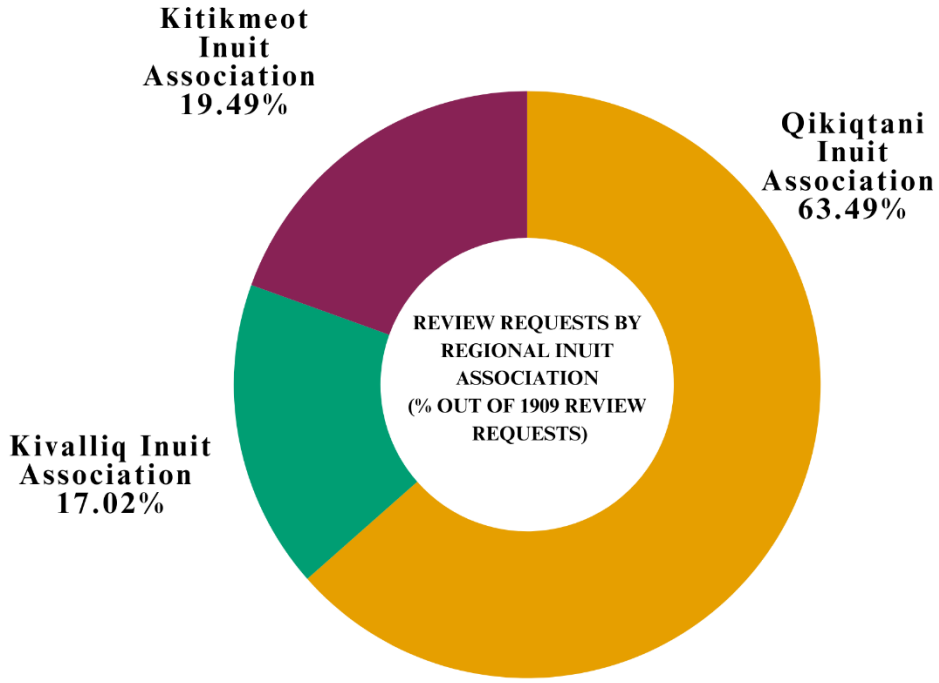


Figure 2.5: Nunavut Research Institute research license review requests (sent to Regional Inuit Associations 2004 – 19), from Polidoro et al., 2022

2.4.2.2 License Review Process

Survey respondents described a range of approaches supporting their review. 9 respondents said they review applications by email. They noted that they use email to both review the application package provided by NRI and share their viewpoints with one another via email until consensus is reached. 7 respondents said they review applications as part of a regularly scheduled meeting to discuss various matters, and 5 said they review applications as part of a specific meeting organized to review and discuss license applications (Figure 2.12). Of those who responded "other" (n=2), alternative methods for

reviewing applications included "Email and I present it to my board" (HTO representative), and "no group review for physical/natural and social science applications" (Inuit organization representative).

Review organizations mostly gather as needed (n=9) to review research license applications, while others meet bi-weekly (n=6), weekly (n=1), or monthly (n=1). 4 respondents do not meet as a group to review applications, as it is part of their individual role within the organization (e.g., as a senior administrative officer or HTO/HTA manager).

2.4.2.3 Time Spent Conducting Research License Reviews

Respondents reported a range in duration of time spent reviewing license applications. Of the 13 respondents who provided a quantifiable response, most (n=5) stated that their review time per application is "30 – 59 minutes" (Figure 2.13). This was followed by "1 – 29 minutes" (n=4), 1 – 2 hours, and "more than 2 hours" (n=2, respectively). One respondent "did not know" how long it takes to review an application (Figure 2.13). Respondents who selected "it depends on the application" reported that factors impacting review include whether:

- "legal representation [is required]"(HTO representative);
- "the research is happening near/around the community" (HTO representative);
- there are "environmental concerns" (CRO representative); and,
- incomplete applications will be sent back "for more information"(CRO representative).

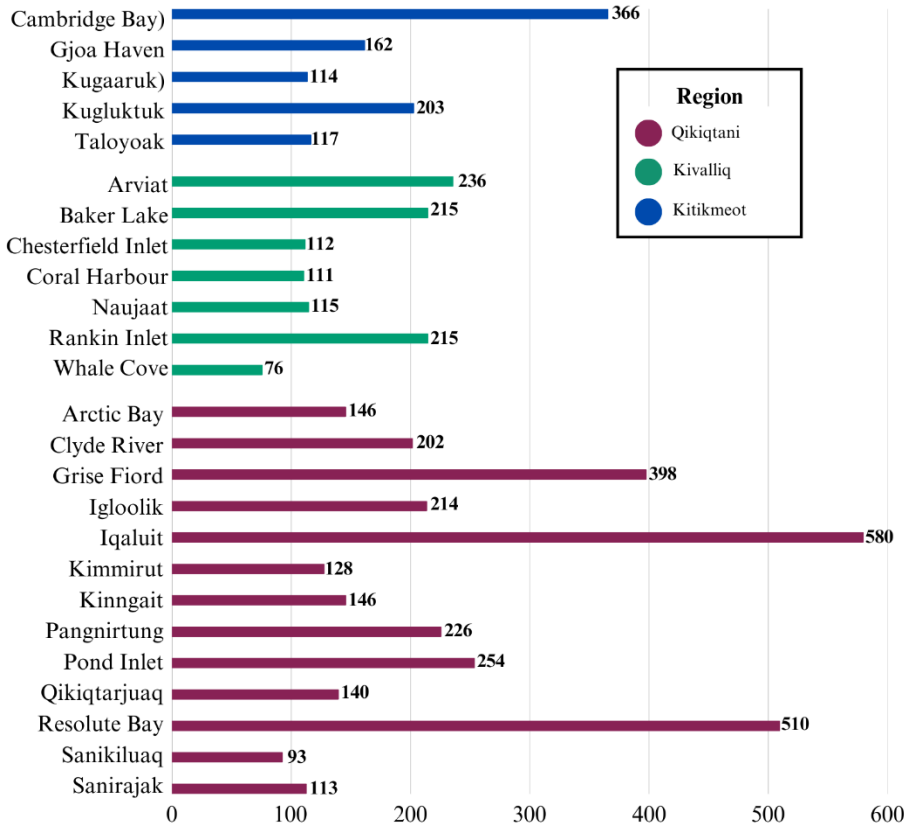


Figure 2.6: Distribution of Nunavut Research Institute research license review requests sent to Hamlet offices (2004 – 19), from Polidoro et al., 2022

2.4.2.4 Reviewer Responsibility

Almost half (45%) of respondents indicated that there are multiple reviewers at the organization**.** They noted that their own role in reviewing a particular application depended on a variety of factors, including: expertise, conflicts of interest, or capacity of senior administrative staff (Figure 2.14). Two thirds (35%) of respondents stated that all members of the organization review applications, while 20% stated that one person representing the organization reviews research license applications.

2.4.3 Review Criteria

Most respondents (n=11) do not use a set of criteria or guidelines when evaluating research license applications, while some (n=8) do. One respondent did not know if criteria or guidelines are used or not. Criteria included a checklist of community-based approaches obtained by the organization, basic guidelines created by the organization, and summary forms that must be completed at the request of the organization. Some organizations evaluate applications based on potential benefits to the community (such as training and economic incentives).

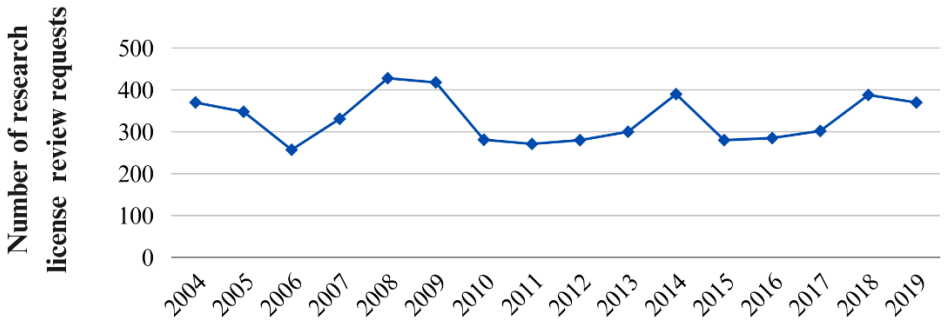


Figure 2.7: Nunavut Research Institute research license review requests to Hamlet offices over time (2004 – 19),
from Polidoro et al. (2022)

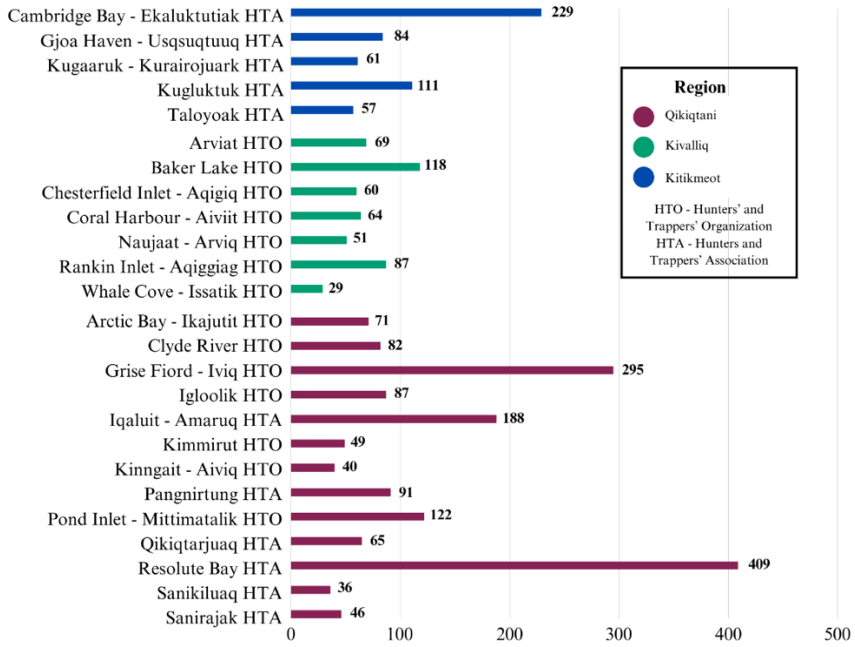


Figure 2.8: Distribution of Nunavut Research Institute research license review requests sent to Hunters and Trappers Organizations/Associations (2004 – 19).
Where: Bathurst Inlet (Burnside) and Umingmaktok (Omingmaktok) are no longer recognized communities, therefore the HTO offices no longer exist and are not included in this study, from Polidoro et al. (2022)

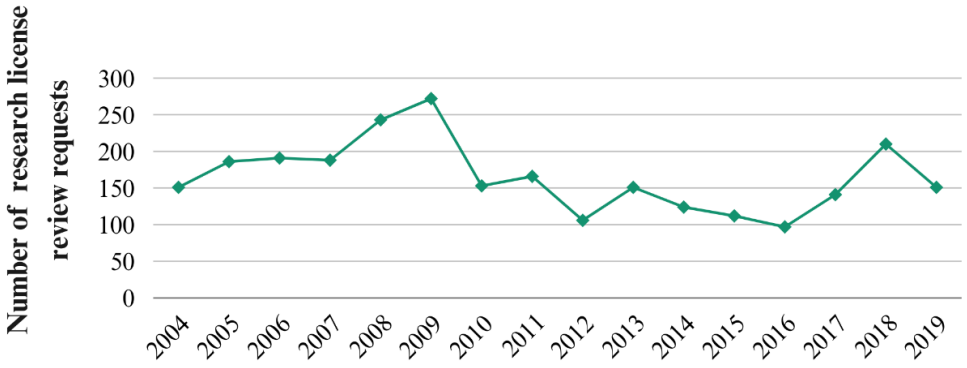


Figure 2.9: Nunavut Research Institute research license review requests to Hunters and Trappers Organizations/Associations over time (2004 – 19),
from Polidoro et al. (2022)

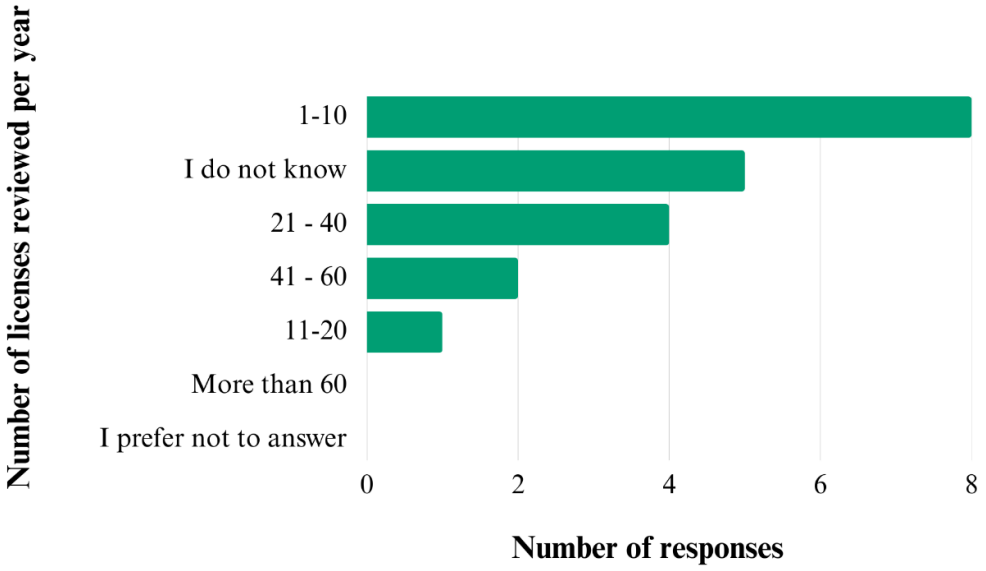


Figure 2.10: Number of licenses reviewed by survey respondents per year.

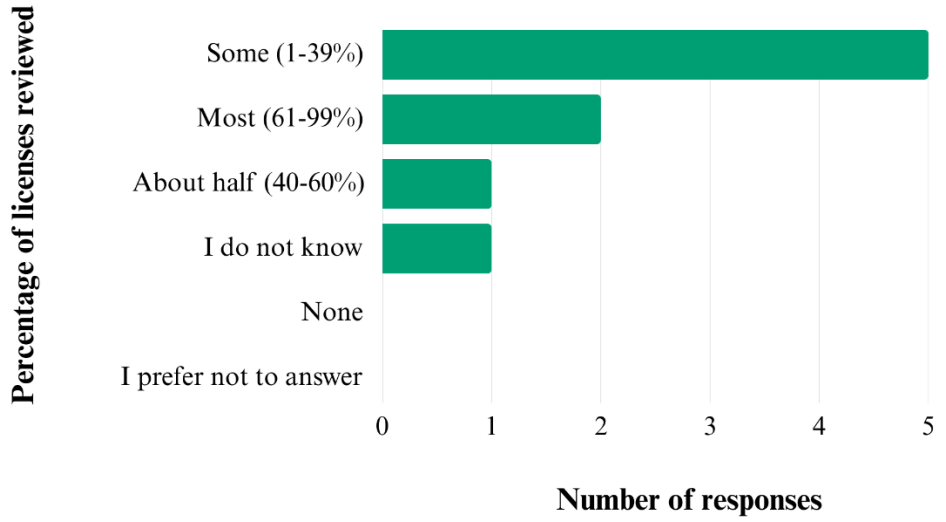


Figure 2.11: Percentage of licenses reviewed in a year, as reported by nine survey respondents who do not review all applications received from the Nunavut Research Institute.

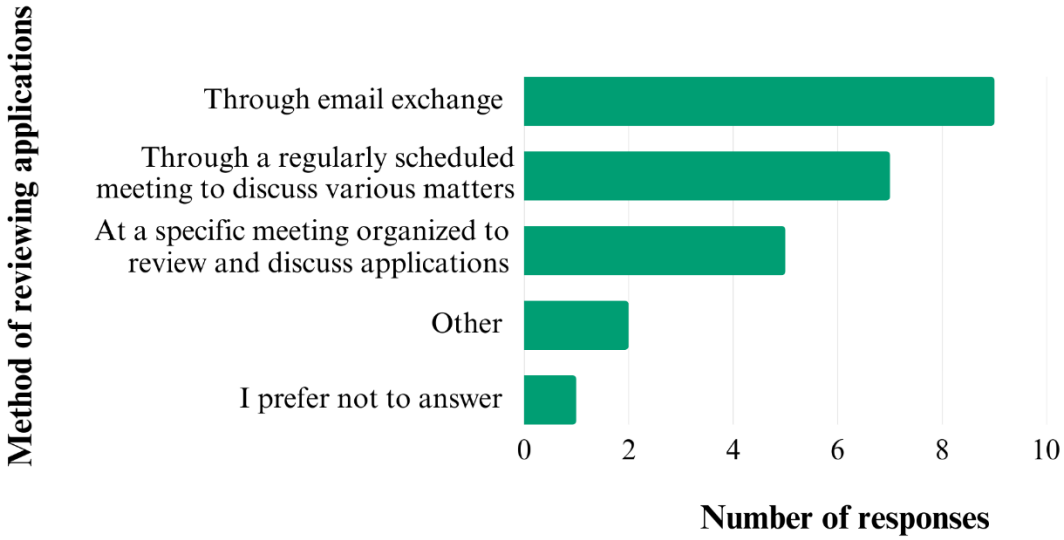


Figure 2.12: Review process for survey respondents.

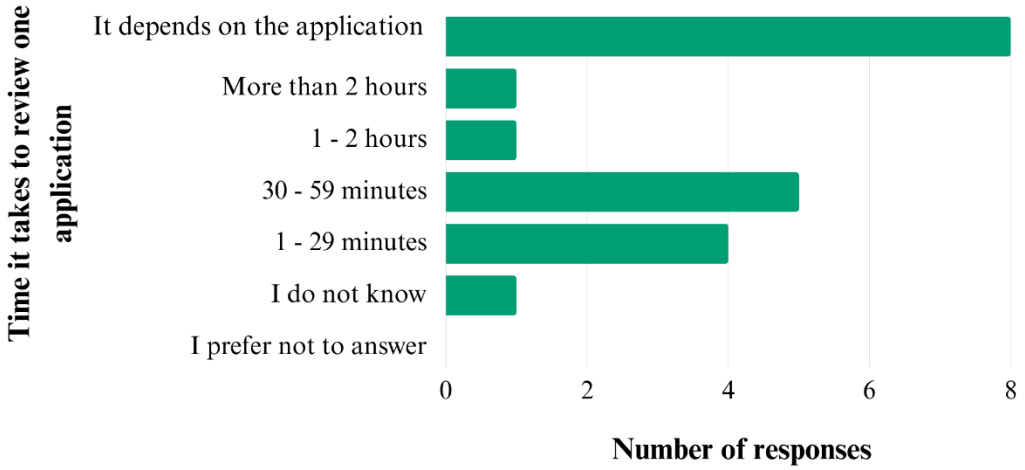


Figure 2.13: Time it takes for organizations to review a single license.

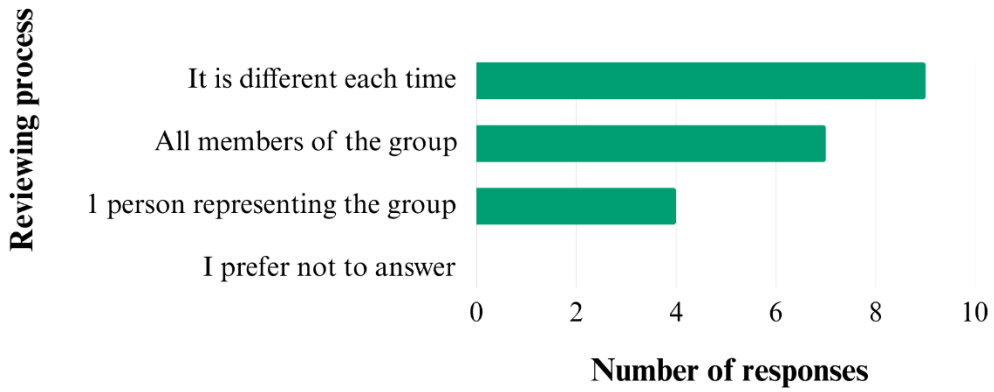


Figure 2.14: Reviewing practices within the organization.

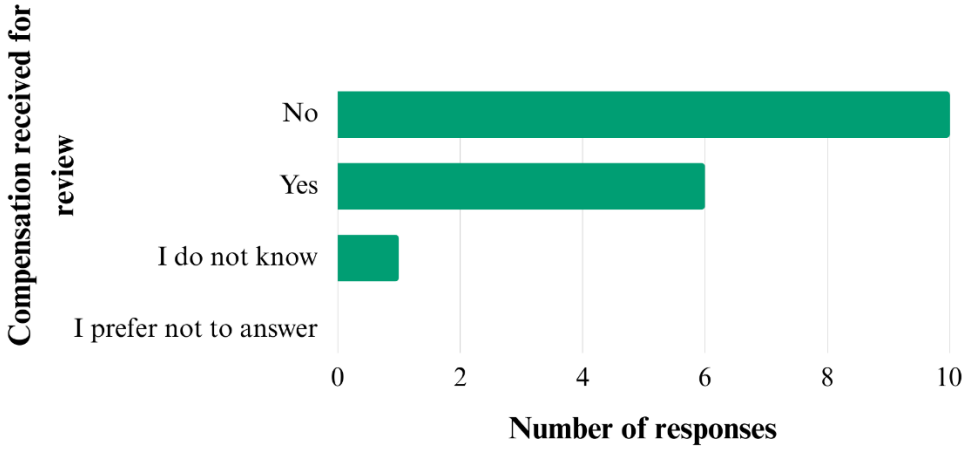


Figure 2.15: Compensation for reviewing research licenses, as reported by 17 survey respondents.

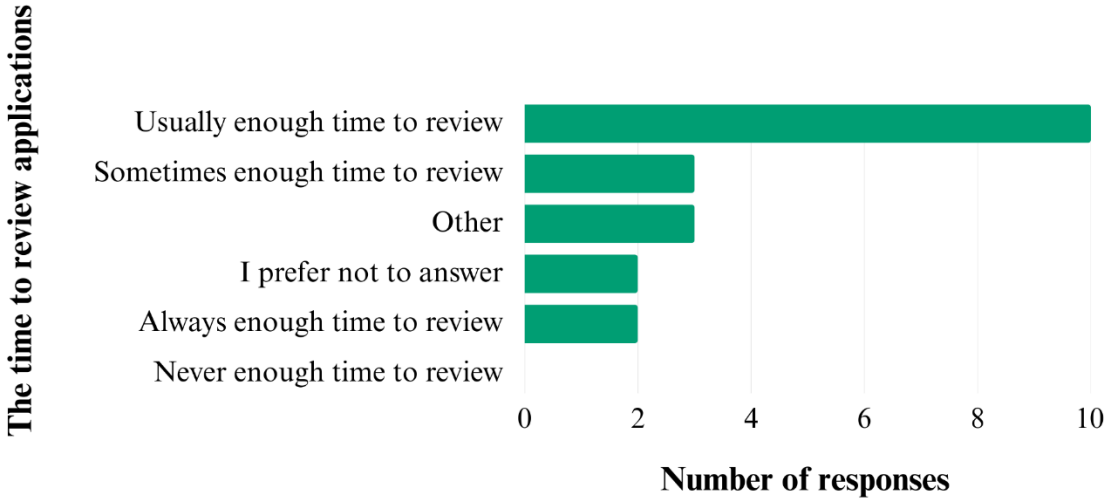


Figure 2.16: Sufficiency of time given to review licenses.

Of 9 respondents who answered "yes" or "I do not know" to questions about the use of guidelines, 6 (66.67%) indicated that they coordinate with other organizations in their community when reviewing applications for health research – related applications. Some organizations involved in the coordinated review of health projects include the Government of Nunavut Department of Health, Qaujigiartiit Health Research Centre, Nunavut Tunngavik Incorporated, and Hamlet health committees. Other organizations consulted include Regional Inuit Associations, schools, Elders, and community-specific organizations.

2.4.4 Review and Compensation

Most respondents (n=10) do not receive compensation for their time in RLR (Figure 2.15). 6 said they are compensated for their time, and one "did not know" if they were being compensated to review research licenses. Of the 6 respondents who received

compensation, half said it is part of their job (i.e., their regular salary, so no additional compensation is provided) and half did not provide details.

2.4.5 Communications with the Nunavut Research Institute

The NRI provides a deadline of 45 days for an organization to complete and return the reviewer recommendation form (NRI, 2021). Half of respondents (n=10) said this is "usually enough time to review" (Figure 2.16), three said this is "sometimes enough time to review," and two said this is "always enough time to review" (n=2). Three respondents selected "other," and no one selected "never enough time to review" (Figure 2.16).

Once they review the license application, nearly half (45%) of respondents indicated that they "sometimes" provide feedback to the NRI. 7 respondents "usually" provide feedback, and two respondents "always" provide feedback to the NRI after review. One respondent said they "never" share feedback (Figure 2.17) and one "did not know." Of the respondents who provided feedback to the NRI, most respondents said they use email to share their written comments (n=13; Figure 2.18). Other means of providing feedback included filling out the reviewer recommendation form (n=8) and in person (n=2). Respondents who do not use the reviewer recommendation form described the process of completing the form as an extra step, and "[It is just] more convenient to email [feedback to the NRI]" (CRO representative). One respondent also mentioned that the form is not always included with the application packages emailed by the NRI.

Nearly half of respondents (n=9) "sometimes" share concerns with the NRI about a research license application. Fewer respondents "always" or "usually" share concerns

(n=3, respectively). One reviewer "never" shares concerns with the NRI, and 4 respondents (20%) do not know how often concerns are shared (Figure 2.19). Reports of concern shared with the NRI varied across respondents. Concerns identified by community research organization representatives included:

- "insufficient engagement with community [by researchers]";
- "overlap with work already being carried out";
- "[the need for improved] methodological design"; and
- "knowledge sharing requirements."

Half of respondents (n=10) reported that they "always" have their feedback addressed by the NRI. 4 respondents said they "sometimes" or "usually" have their feedback addressed. In most cases the concerns need to be addressed directly by the researcher(s) in terms of providing more detail or adjusting plans according to RLR feedback. One respondent also articulated that their concerns go beyond the licensing process itself, as there are "more systemic challenges around how research is conducted in Nunavut" (Government of Nunavut representative).

6 respondents said they either "sometimes" or "never" request terms and conditions as part of a research license, while 5 respondents did "not know." Two respondents said they always request terms and conditions, and one reviewer "usually" requests terms and conditions. (Figure 2.20). Those who do request terms and conditions expressed the need for "more detailed plans [to be included in the applications]" and said they would like to see researchers "providing confirmed support from communities" (Inuit organization

representative). Other examples of terms and conditions requested by RLR organizations included for applications to:

- "Have HTO directors and its [board] members [participate in projects]" (HTO representative);
- Plan for "proper compensation for participants" (CRO representative);
- "ensuring research will benefit community" (CRO representative);
- Have a "requirement to have written letters of support" (CRO representative);
- and plan for sharing a "final report [at the end of a project]" (CRO representative).

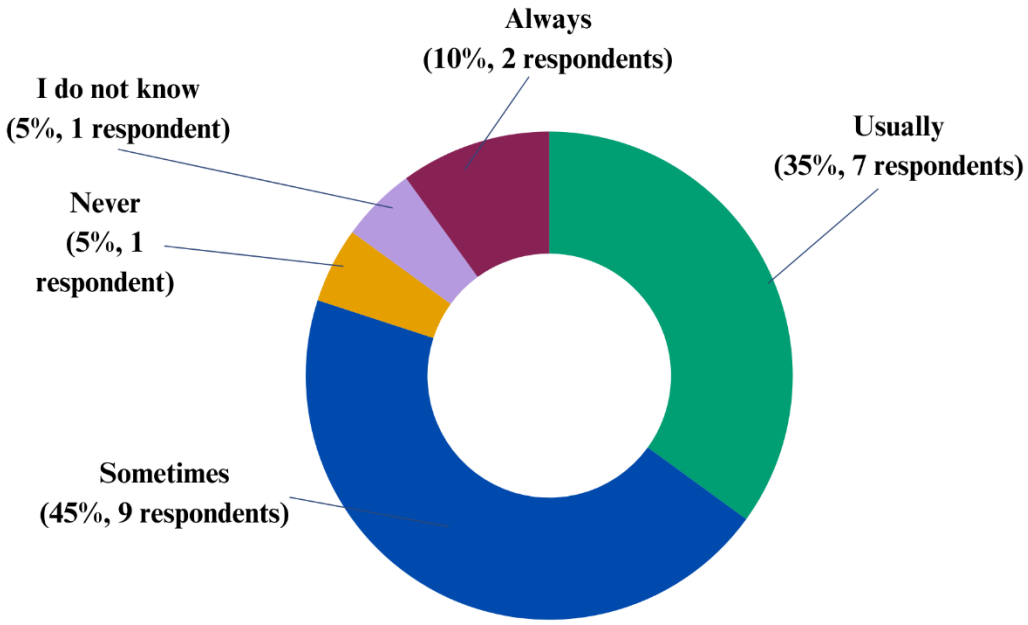


Figure 2.17: Frequency of feedback shared with the Nunavut Research Institute.

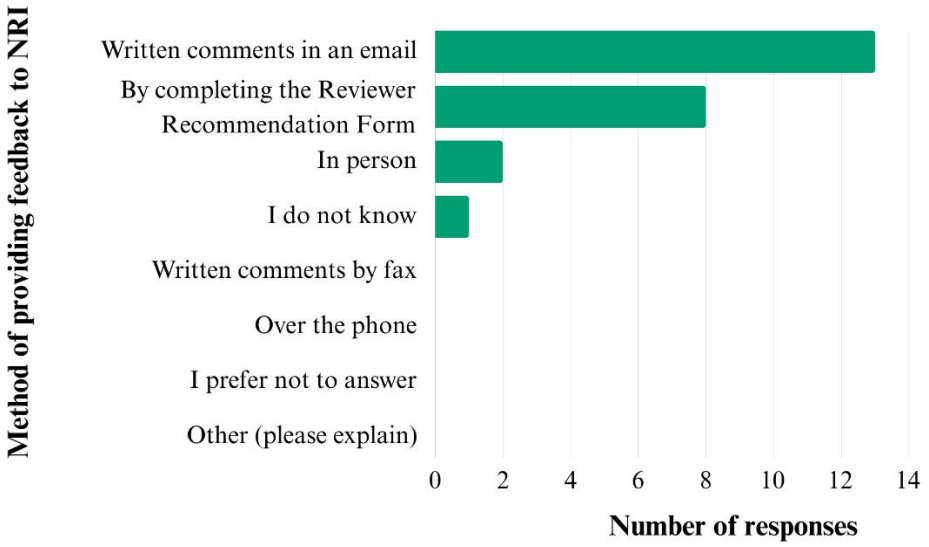


Figure 2.18: Method of providing feedback to the Nunavut Research Institute.

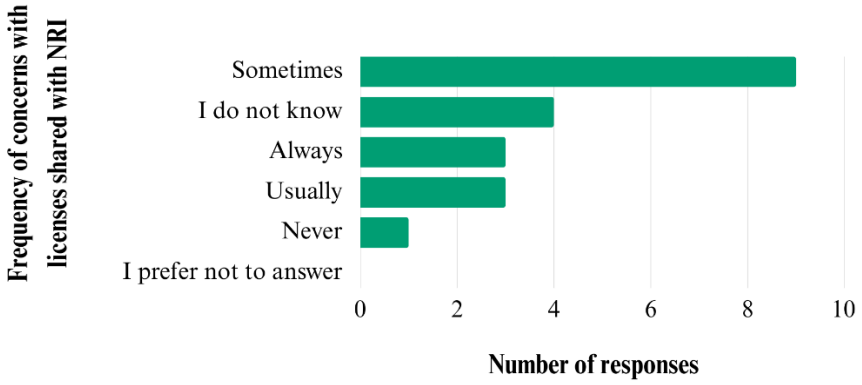


Figure 2.19: Frequency with which respondents shared concerns about license applications with the Nunavut Research Institute.

Respondents varied in whether they felt their terms and conditions were being met. Some RLR organizations were satisfied and mentioned that the "NRI does a great job" (CRO representative), while others were unsure whether terms and conditions are met, or "if there is any follow-up to ensure it has been met" (Inuit organization representative).

As part of the NRI's licensing requirements for research license renewal, researchers are required to submit an annual report on their research activities by December 31 of each year (NRI, 2021). 8 respondents did not know how often their organization receives annual reports from the NRI (Figure 2.21). 4 respondents each said they "sometimes" and "usually" receive reports, while two respondents said they "always" and "never" receive annual reports, respectively (Figure 2.21).

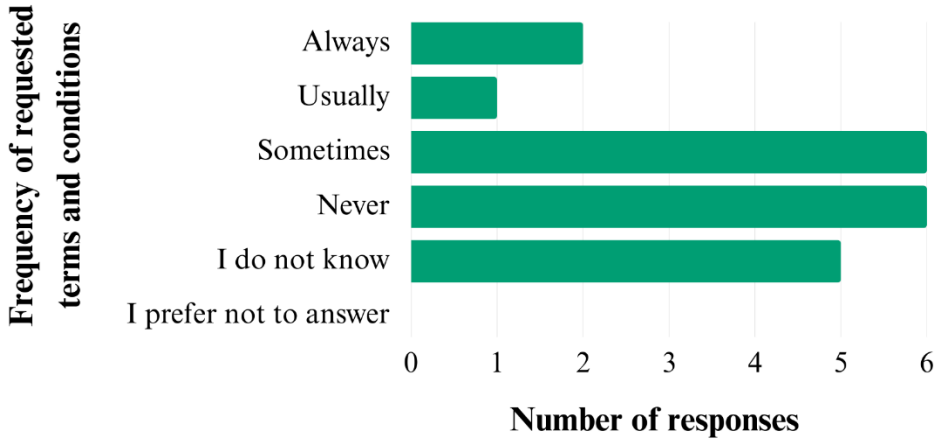


Figure 2.20: Frequency with which respondents requested terms and conditions from license applicants.

Among respondents 18 ranked their level of agreement with a series of statements about their experience with the RLR process. They identified two strengths in the RLR process: timely responses from the NRI and sufficient information provided by NRI for each project (Figure 2.22). A weakness observed in the RLR process was the need to seek expertise for technical applications. Additionally, most respondents said they "somewhat disagree" with the helpfulness of the reviewer recommendation form (over other possible responses, from "Not Applicable" to "Strongly Agree," Figure 2.22). The accuracy of Inuktut translations received the highest responses of "I do not know," but most respondents were satisfied with translation (Figure 2.22). "Have HTO directors and its [board] members [participate in projects]" (HTO representative);

- Plan for "proper compensation for participants" (CRO representative);
- Have a "ensuring research will benefit community" (CRO representative);
- Have a "requirement to have written letters of support" (CRO representative);
- and plan for sharing a "final report [at the end of a project]" (CRO representative).

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2.4.6 Opportunities and Challenges

Respondents identified several opportunities and challenges with the RLR process. One opportunity was for researchers to "explain about the research in person with my board" (HTO representative). Additionally, respondents identified an opportunity for researchers to communicate "what difference the research is going to make [for the community]" (Hamlet representative). As for challenges, respondents described needing more coordination in responses with other organizations reviewing the same application (Figure 2.6). Respondents also called for more quality control at the NRI, including application completeness, readability, and less technical jargon to help ensure applications are "actually written appropriately for community review" (CRO representative).

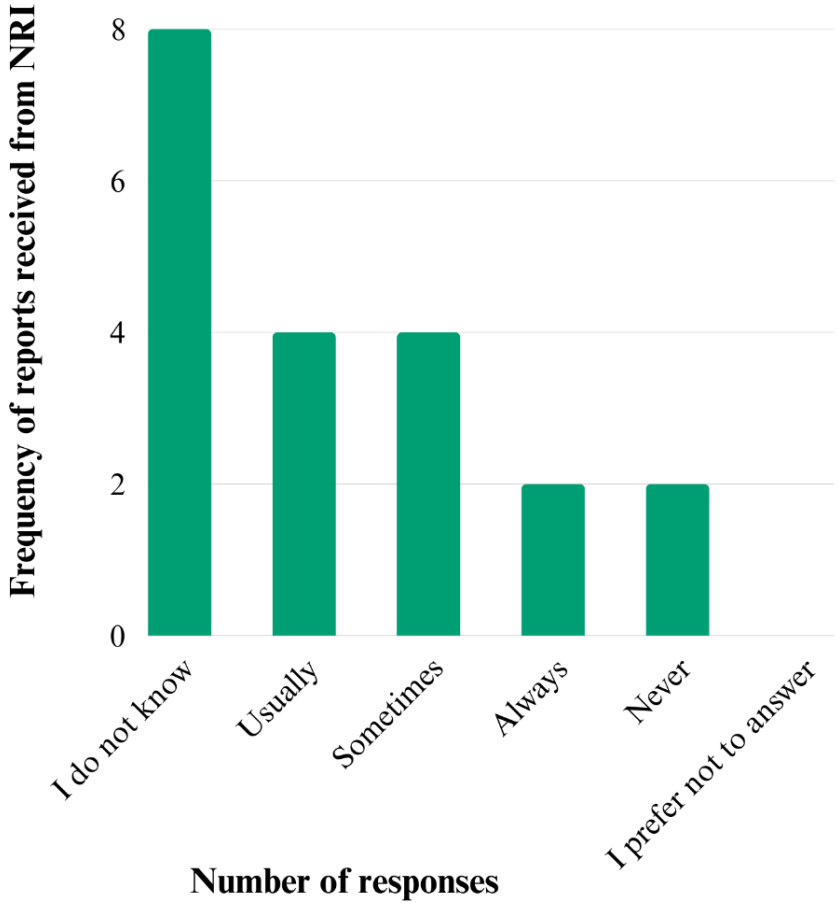


Figure 2.21: Frequency with which respondents receive researchers' annual reports from the Nunavut Research Institute.

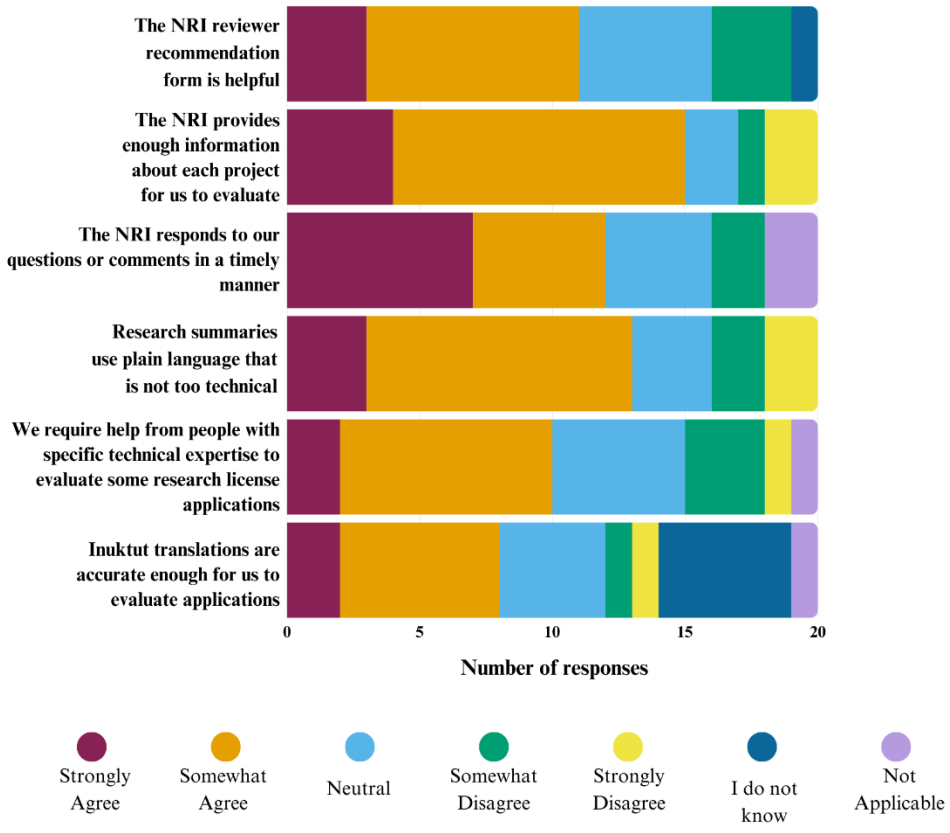


Figure 2.22. Series of responses for levels of agreement with the RLR process.

2.5 Discussion

Our exploration of RLR organization experiences across Nunavut was valuable to deepen collective understanding of the intensity of research review requests and the diverse ways RLR organizations manage the review process internally. Survey responses provided important insights into challenges RLR organizations face, and ways the NRI and researchers could help ease the burden of review.

2.5.1 Refining Research License Review Processes

2.5.1.1 Resources and Funding for License Review

Our results concur with the existing literature (Nickels & Knotsch, 2015; Kuokkanen, 2020) in identifying the need for enhanced community capacity to support RLR. Our study thus emphasizes the importance of sufficient resources (human and funding) to enable meaningful RLR. The challenges experienced by RLR organizations, such as lack of funding and compensation for RLR, provide a unique opportunity to improve community experiences with this process. Long-term funding for hiring and training individuals could increase local capacity to facilitate RLR, and therefore, could reduce challenges experienced by these organizations (Itchuaqiyaq et al., 2023). Our findings in Nunavut support the work of Perrin, Ljubicic, and Ogden (2021), who suggested that long-term funding for hiring and training could increase the number of individuals who can facilitate RLR and, therefore, reduce local capacity burdens. The need for more funding to support Indigenous-led initiatives is also prominent at national (ITK, 2018a; Government of Canada, 2024) and territorial levels (ITK & NRI, 2007), while international Inuit organizations, such as the Inuit Circumpolar Council, are calling for appropriate compensation for community involvement in research (Inuit Circumpolar Council, 2022). Considering the inconsistencies in compensation they received to review applications (Figure 2.15), RLR organizations may need to use their own funding to ensure adequate funding for staff to focus on RLR review. For example, they could apply to targeted funding calls, such as the Government of Canada (2024:1) Indigenous Capacity Support Program, designed to "support the development of local and regional capacity" for

project and environmental impact assessments. The website for Inuit Tapiriit Kanatami's displays funding opportunities from various organizations and offers community development grants tailored to individual community needs and priorities (ITK, 2025). For communities that do not have the experience or time to draft a funding proposal, research organizations like ArcticNet offer resources to help draft and refine such applications (ArcticNet, 2025). Additionally, as research interest and demand on RLR time grow, securing core funding will be essential to the capacity and continuity of RLR organizations, for example, through specialized research support, or specific RLR positions funded by the territorial government or through the land claim organizations.

2.5.1.2 Technical Support for Applications

Some RLR organizations highlighted the importance of ensuring completeness of applications and improving plain language components. Our survey results indicate that methodological techniques described in license applications are sometimes too technical for RLR organizations to understand, and they can request assistance from external experts to understand the proposed activities. These challenges may contribute to RLR organizations not reviewing certain applications because they do not have time to understand the technical language or ask for assistance, or because they do not feel they can return the applications. As a result, after the 45-day review window (NRI, 2021), applications are approved by the NRI without feedback or thorough review.

Although the NRI requires researchers to submit plain language research summaries as part of the application and reporting process (NRI, 2021; Polidoro et al.,

2024), our findings show RLR organizations still do not find application language and research methods descriptions accessible enough. The Aurora Research Institute (ARI) (2019) in the Northwest Territories also calls for researchers to use plain language as a tool for effective communication, as reviewers do not always have technical expertise. This aligns with recommendations from Pedersen et al. (2020) and Prno et al. (2021) that encourage researchers to consider language barriers and avoid jargon when conducting research in Inuit communities. Given these findings, researchers can work on developing their plain language writing skills through independent training and consultation with licensing agencies to ensure appropriateness of the language used in applications. This would, in turn, result in a streamlined review process (avoiding the need to return applications for clarification) and ensure a higher quality of translated materials into Inuktut. Additionally, researchers could conduct research planning visits to initiate consultation, explain methods and local benefits, and address concerns with community members or organizations involved (Held, 2020). This could help close communication gaps between community members and researchers with respect to understanding methodological approaches and appropriate language. When thinking about long-term goals and priorities for research in Nunavut, current legislation, such as the *Scientists Act,* could be amended to give more power and control to RLR organizations to withhold license approval until language is refined to be accessible and understandable to RLR organizations.

2.5.1.3 Criteria for License Review

Over half of RLR organizations that completed the survey indicated they do not use a set of criteria when reviewing applications. Also, most respondents do not use the reviewer recommendation form to support their review. Respondents reported that administrative workloads and inconsistencies in receiving the reviewer recommendation form (from the NRI) are key barriers to using supporting documentation in the review process. There may be benefits to establishing regional and community-specific guidelines for research, but there are also challenges with creating standardized criteria when each community or region seeks to address their own unique priorities. Existing guidelines provide common considerations in working with community partners, including: consultation, research agreements, methodology, informed consent, compensation, data ownership, funding, and next steps for the project (Table 2.1; NRI, 2021; Panel on Research Ethics, 2022; CCA, 2023; Itchuaqiyaqet al., 2023; Aqqiumavvik Society, 2024; QHRC, 2025). These guidelines could be used by reviewers as a starting point to create their own checklist to help them evaluate research license applications or inform the development of organization-specific guidelines. Establishing clear review criteria could make it easier for RLR organizations to manage the review process and make reviews more efficient, and could help researchers to know what to include in their licensing applications. By following the considerations articulated by RLR organizations in our survey, researchers can also propose and facilitate projects more relevant to the community (Jull et al., 2020; Cadman, Snook, & Bailey., 2022). If researchers are unsure about specific

guidelines, the NRI could liaise with them and review organizations, ensuring relevant criteria are clearly communicated to researchers.

2.5.1.4 Terms and Conditions

According to our study, most respondents requested terms and conditions (Figure 2.20). However, not all respondents knew if their terms and conditions were met. To help address this challenge, the NRI could work towards co-developing and monitoring the implementation of terms and conditions. In this way, they could more effectively share responsibility with RLR organizations. Giving more authority to community organizations supports a research agenda better aligned with Inuit priorities (Cram et al., 2013; Snow et al., 2016). This is already being done in the Yukon, where self-governing associations are developing their own research guidelines, criteria, and approval processes (GTC, 2011). Additionally, a First Nations University, University nuhelot'įne thaiyots'į nistameyimâkanak Blue Quills (UnBQ), in Alberta facilitates a review process involving external reviewers, such as Elders or knowledge holders, to avoid misrepresentation of cultural knowledge (CCA, 2023). In the United States, the Indigenous Research Protection Act (Indigenous People's Council on Biocolonialism, n.d.) has led to the creation of research review committees within Indigenous communities. These committees are responsible for coordinating with researchers and negotiating their own terms and conditions for research activities on their land (Indigenous People's Council on Biocolonialism, n.d.). This contrasts with the current legislation in Nunavut where, under the *Scientists Act*, RLR organizations can only make recommendations (NRI, 2021). It is the Nunavut science advisor, acting on behalf of the Minister (RSNWT (Nu) 1988, c S-4),

who has the decision-making power to deny a research license application. Updating current legislation is a key starting point towards increasing Nunavummiut governance and decision-making power over research conducted in their homelands (Ogden & Schmidt., 2016; Jull et al., 2020; Perrin et al., 2021). Nevertheless, more work needs to be done to increase communication between RLR organizations and the NRI with respect to implementation and follow-up of terms and conditions on a research license.

2.5.2 Reimagining Research Design

In our survey, RLR organizations reported key concerns with incoming research license applications, including: i) a lack of confirmed support and community involvement throughout the project; ii) duplication of projects; and iii) poor quality of, and limited or no access to, translated materials. To reimagine how research is designed, conducted, and implemented across Nunavut, these concerns indicate three opportunities.

Table 2.1: Compilation of research considerations outlined in five community, regional, and National Inuit research guidelines

Supporting resources and documentation					
	Aajiiqatigiingniq Research Methodology (Aqqiumavvik Society 2024)	National Inuit Strategy on Research (ITK 2018a;b)	Obtaining a Research License under Nunavut's Scientists Act: A Guide for Applicants (NRI 2021)	Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – Chapter 9 (Panel on research ethics 2022)	Qaujigiartiit Health Rresearch Centre health research ethics checklist (QHRC n.d)
Is the community being consulted?	X	X	X	X	X
Is there a community-research agreement?	X	X		X	X
Are the methods appropriate?	X	X	X	X	X
What are the risks and benefits?	X		X	X	X
What are the recruitment strategies (if any) ?			X	X	X
Confidentiality			X	X	X
Is informed consent upheld?		X	X	X	X
Will there be compensation, for whom, and how much?			X		X
Is reporting effective?	X	X	X	X	X
Are there any conflicts of interest (if so, how are they addressed)?				X	X
Is there institutional ethics approval?		X	X	X	X
Is there a data ownership agreement?		X	X	X	
Are the next steps of project discussed?	X				
Is the funding source and allocation clearly communicated?		X	X	X	

The first opportunity to reimagine research design is for researchers to provide confirmed support and participation from community members in the proposed projects (Figure 2.16). Communities in the High Arctic experiencing some of the greatest review burden (Figure 2.6) have minimal community involvement, mainly because licenses they review are for projects in remote field camps far away from communities (Holm et al., 2012; Willis, 2018; Isirvik, 2025). As a result, communities are unaware of the research in and around their homelands, as well as the outcomes of such projects (ITK & NRI, 2007; Polidoro et al., 2024). This lack of transparency in research conduct and reporting is regarded by Inuit as harmful and reflects the ongoing influence of colonial approaches of research in Canada's Arctic regions (Healey & Tagak, 2014; Riddell et al., 2017; Perrin et al., 2021). To address such legacies, researchers must acknowledge the importance of involving Inuit in their research and discuss this in their research license applications. The NISR (ITK, 2018a) calls for improved transparency in the research process to increase Inuit governance in research**.** The intent is to ensure that the Inuit have the more complete and clearly articulated information researchers can share to help support decision making around proposed projects. Pedersen et al. (2020) highlight that one effective collaborative approach to research is to involve Inuit youth. They drew this insight from their analysis of Ikaarvik, a research program that gives Inuit communities the opportunity to answer their own research questions. Held (2020), meanwhile, in a reflection on lessons learned from fieldwork, points to the importance of co-developing research questions in person. Others (Itchuaqiyaq et al., 2023; Carter et al., 2025) encourage researchers to collaborate

with communities very early in the research process, as this supports the co-creation of new knowledge and informs decision making.

A second opportunity to reimagine research design is to work towards reducing the duplication of research, thus reducing research fatigue. Researchers may ask questions about, or propose work on, topics similar to previous work without knowing so. Duplication also occurs when community feedback is not adequately considered in research proposal development or the research license approval process. Fatigue may be reflected in the reluctance of community members to take part in research projects, or low participation in research consultation and engagement activities (Brunet et al., 2016; Rink & Reimer, 2019). In these cases, fatigue stems from the perception that research is not producing meaningful local benefits, or from specific experiences of this lack of benefit (CCA, 2023). Additionally, fatigue is also about the sheer volume of licenses received (Figure 2.2) and not having the capacity (accessible language, time, funding, or people) available to facilitate RLR (Wong et al., 2020). The three territorial governments have called for improved coordination between researchers and communities to prevent research duplication (Governments of Nunavut, Northwest Territories, & Yukon, 2016). Within the licensing process, the Council of Canadian Academies (2023) recognizes the importance of feedback to inform research outcomes; however, current policies limit community decision-making powers. In Nunavut, the Isirvik research portal (Isirvik, 2025) can be a valuable tool to help reduce research fatigue. This interactive database can be used by researchers to search for research topics, locations, principal investigators, methods, and reporting tools (Polidoro et al., 2024) related to their areas of interest. Isirvik helps to

improve research transparency, as researchers can identify existing concentrations of areas (in a community, or at remote field sites), topics, and researchers already engaged in similar research questions. Due diligence by researchers carried out to better understand the research landscape and define local needs and priorities up front (Snook et al., 2018; Henri et al., 2020; Itchuaqiyaq et al., 2023) aids in identifying potential overlaps. Where overlaps are identified, researchers can address them by either reaching out to community organizations or other research groups to collaborate, or by adjusting topics or geographic areas to address research gaps.

The third opportunity is to improve the quality of translated materials in applications and ensure they are accessible to RLR organizations. Although project summaries and reports are required to be translated into Inuktut (NRI, 2021), RLR organizations continue to express their concerns with the quality of translations in license applications they receive. The NRI licensing manager cannot be responsible for checking translation accuracy and completeness. With only one licensing manager, there is limited capacity to consistently follow up with researchers about missing materials from the application package, or translation concerns. The need for translated research materials is recognized by other community research organizations, such as Ikaarvik (for any outputs being left with the community) (Pedersen et al., 2020) and Exchange for Local Observations and Knowledge of the Arctic (Pulsifer et al., 2012; Johnson et al., 2021). Similarly, communities across Inuit Nunangat may not have the capacity to support translation of research licensing materials (Snook et al., 2018; Wong et al., 2020). This must be strengthened to support effective engagement in the research process (CCA, 2023;

Carter et al., 2025). The NRI could contribute to translation improvements by recommending translators known to be experienced with research, along with specific terminology related to project contexts. It is also important to seek translators who work in the appropriate local dialect of Inuktut (Carter et al., 2025), as this can greatly enhance the relevance of translated materials. However, the researcher is also responsible for assuring accuracy of translations through:

- Use of plain-language English or French for easier translation into Inuktut;
- Efforts to seek NRI and community guidance on skilled interpreters who are comfortable working with research terminology relevant to the specific project;
- Work with interpreters to ensure concepts are clear and understandable, so that underlying meanings are effectively conveyed (and not just literal translation, which often doesn't make sense in Inuktut); and
- Allotment of enough time and funding dedicated to effective translation.

2.5.3 Improving Research Reporting

Research reporting is regarded as the final stage of a research project. It is critical for researchers to follow up with RLR organizations when reporting their findings (Polidoro et al., 2024; Carter et al., 2025). Currently, researchers are required to submit an annual report to the NRI of their findings and progress and are also expected to disseminate results to the community. However, RLR organizations indicated in survey responses that they do not always receive these reports (Figure 2.21). Despite significant emphasis on research reporting over the past decade or more (ITK, 2018a, b; Pedersen et al., 2020;

Polidoro et al., 2024), RLR organizations still feel there is insufficient engagement between research groups and communities, and concerns remain about researchers not sharing their findings with communities (Figure 20; NRI, 2021; Polidoro et al., 2024).

To maintain community relationships after the completion of a research project, it is important to maintain contact with the community and share results. Indigenous community organizations, such as the Aqqiumavvik Arviat Wellness Society (Carter et al., 2025), Gwich'in Tribal Council (2011), and Ikaarvik (Pedersen et al., 2020), among others, recommend that researchers return to the community to present findings in a culturally relevant manner. University-based researchers tend to favour the use of academic reporting methods, like journal articles and conference presentations (Polidoro et al., 2024). However, it is necessary for researchers to respond to the concerns expressed by RLR organizations and adopt more community-specific reporting methods, such as posters or community presentations (ITK & NRI, 2007; Henri et al., 2020; Polidoro et al., 2024). Other creative and community-engaged approaches to celebrating completed research and sharing results include hosting a community event or feast, presenting in schools, and radio shows (Snow et al., 2016; Henri et al., 2020; Pedersen et al., 2020; NRI, 2021; Ljubicic et al., 2022; Carter et al., 2025).

2.6 Conclusions

Research license review in Nunavut is essential for engaging with, and consulting communities (including local and regional organizations) in planning and reporting on research projects. To better understand community experiences with RLR, and to help

enhance current licensing practices in Nunavut, it was important to understand organizational volume of review requests received, current review protocols and practices, opportunities and challenges associated with RLR, and recommendations for improvement. Through sharing their experiences, RLR organizations also identified strategies to support the NRI's research licensing practices, and opportunities for researchers to update their applications based on community needs and priorities. Improvements in the RLR process can contribute to efforts to enhance Inuit self-determination in research.

Using a survey, we identified organizational processes in RLR organizations that participated in the study. The concerns expressed by our respondents are indicative of systemic challenges in how research is conducted in Nunavut in relation to community engagement, consultation, and reporting. Reflecting on our results, we identified several opportunities for researchers, reviewers, and the NRI to help streamline reviewing processes, increase researcher accountability, and strengthen communications (Table 2.2). These recommendations aim to enhance research conduct, support Inuit self-determination in research, and align with the NISR implementation plan (ITK, 2018b).

Table 2.2: Recommendations for Review Organizations, the NRI, and researchers in Nunavut, to improve license review processes

Recommendation	*Potential Impact*
What can Research License Review organizations do?	
Establish quarterly deadlines to review applications	• Helps alleviate review burden throughout the year (summer vs winter) • Encourages researchers to submit applications well ahead of field season • Creates less pressure on review organizations to complete a license review in a short period of time (especially in high volume seasons)
Coordinate regularly scheduled meetings with the Nunavut Research Institute (NRI)/ researchers	• Improves communications with NRI and researchers to gain clarification on applications as needed • Increases researcher accountability through communicating directly with RLR organizations
What can the Nunavut Research Institute do?	
With research license review organizations, co-develop a summary outlining expectations for reviewers	• Contributes to a shared understanding of expectations for reviewers/the review process between reviewers and the NRI
With research license review organizations, co-develop training resources and guidelines for reviewers	• Provides support to RLR organization staff to complete a thorough review
Implement training for researchers and reviewers to use Isirvik research portal, and the application process	• Raises awareness about Isirvik research portal to increase the number and type of groups accessing it • Reduces duplication of research, and thus research intensity and fatigue in some communities • Creates potential opportunities to increase capacity in under-researched areas (through community involvement, training/skills development within the projects)
Initiate consultations with legislative experts to update the Nunavut Scientists Act	• Amending the Scientists Act can increase the decision-making authority of community RLR organizations
What can researchers do?	
Incorporate plain language (ex: simplified descriptions of methods and no technical jargon)	• Results in greater understanding of applications and less need for RLR organizations to seek external expertise to help clarify application content • Reduces burden and expenditure of resources to ensure thorough review of license applications
Foster partnerships and meaningful relationships with communities	• Responds to calls from Inuit organizations (such as the National Inuit Strategy on Research (TK, 2018a for co-developed and partnered research • Leads to improved clarity and efficiency in developing and reviewing research license applications, because researchers have already worked with community partners in preparing the application • Leads to more meaningful, community-relevant projects having a positive impact, benefit communities, and build on existing capacity
Share research results with community members and organizations, and other relevant decision-makers in Nunavut	• Puts the results in the hands of those most affected by the research, and those positioned to make decisions on the topic (i.e. provides evidence they can use) • Improves research communication, as most reviewers do not receive project outputs (including annual license reports) from projects.

2.6.1 What Organizations Could Do

To alleviate the burden of review requests throughout the year, RLR organizations can work in consultation with the NRI to establish regularly scheduled review deadlines (quarterly, monthly, etc). This can benefit RLR organizations because it can help them plan accordingly. They can predict the exact date they will receive applications, which will help them anticipate their deadline to review. In addition, specific review dates will ensure researchers submit their applications well in advance of their research and travel dates to allow time for review completion (Table 2.2). These efforts contribute to the development and operation of Inuit-led review processes (NISR action 2.2). We also recommend that RLR organizations schedule meetings with the NRI and researchers as needed to strengthen communications between parties and gain clarification on applications. Additionally, improved coordination between the NRI and RLR organizations can also facilitate researcher accountability, as both parties can coordinate on the approval and review of their applications (Table 2.2).

2.6.2 What the Nunavut Research Institute Could Do

To support RLR organizations, the NRI can collaborate with RLR organizations directly to co-develop training resources and guidelines for reviewers, outlining expectations and developing checklists to conduct a thorough review (Table 2.2). Through this training, the NRI can promote and share resources for the Isirvik Research Portal as a tool to identify the research landscape in Nunavut (Polidoro et al., 2024) and reduce research duplication. The reviewer guidelines can resemble the current guidelines the NRI

established for researchers (NRI, 2021). This will help RLR organizations better understand what is expected of them in the decision-making process of RLR. The implementation of training resources and materials directly supports NISR Goal 1.2.3, to "develop accredited research training for Inuit including capacity building tools and guidelines for research methodologies, evaluation" (ITK 2018b:8).

One key pillar of the NISR is to advance Inuit governance in research (ITK, 2018a,b), where objectives include the reform of research-related legislation and policies impacting Inuit Nunangat. To help reach this objective, the NRI can initiate consultations with key individuals (policy analysts) to begin a legislative review of Nunavut's Scientists Act to consider updating and clarifying requirements and standards for Inuit engagement in the licensing process. If changes are made to the Act, this can help define and reinforce scopes of authority Inuit organizations and communities hold in determining whether research license approval should be granted (along with power to reject applications or withhold approval until all conditions are met).

2.6.3 What Researchers Could do

Recommendations for researchers amplify existing calls for researchers to improve ethical research practices, community engagement, and results reporting (ITK, 2018a, b; Truth & Reconciliation Commission of Canada, 2015; Wong et al., 2020; Itchuaqiyaq et al., 2023; Carter et al., 2025). We recommend that researchers use only plain language in their research license applications. Although plain-language summaries are required as part of the NRI application (NRI, 2021), our results indicate a need for less technical jargon

throughout all sections of a license application (Figure 2.22). This will reduce the RLR burden and expenditure of resources needed to bring in experts to help clarify applications.

NISR Action 2.6.1 calls for "Community engagement to inform the development of community-based research review processes" (ITK, 2018b: 12). Our recommendations echo those of others emphasizing the importance of researchers working to foster meaningful relationships and engagement in communities well in advance of submitting their research license applications (Gearheard & Shirley, 2007; Pedersen et al., 2020; Carter et al., 2025). By developing strong, trusting, mutually beneficial research relationships, RLR organizations will already have familiarity with the researcher, know the researcher's context and values, and will have developed the rapport needed for communication and collective decision making (Table 2.2).

Working to improve the efficiency, transparency, and coordination of RLR processes contributes to ongoing efforts to increase the positive impacts of research throughout Inuit Nunangat (Polidoro et al., 2024) and enhance Inuit self-determination in research (ITK & NRI, 2007; ITK, 2018a; NRI, 2021). This research directly responds to the NISR Calls to Action to create enhanced community review processes and develop a database to increase Inuit access to research information (ITK, 2018a, b). Through our exploration of RLR experiences, we gained a baseline understanding of reviewers' practices. However, more research is required to understand the nuances of each organization, and the similarities and differences of their individual review processes. By continuing to explore and refine RLR processes, we can ensure research within Inuit

Nunangat is not only more effective and inclusive, but also reflective of Inuit values and priorities.

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CHAPTER 3

IS RESEARCH LICENSE REVIEW MEETING EXPECTATIONS? LESSONS LEARNED FROM NUNAVUT COMMUNITY REVIEW EXPERIENCES

3.1 Introduction

Inuit Nunangat (Inuit homelands) encompasses 4 regions: Inuvialuit Settlement Region (Northwest Territories and a small portion of the Yukon); Nunavut; Nunavik (northern Québec); and Nunatsiavut (northern Labrador). Research throughout Inuit Nunangat is subject to unique governance structures reflecting Inuit rights in land claim agreements and territorial/provincial legislation. The administration of research licenses serves as an essential gatekeeping mechanism to help ensure relevant and ethical research in the physical and social environment (Beltrano et al., 2026; 2024; Polidoro et al., 2024). Unlike generic institutional ethics review processes, research licensing in Nunavut considers Inuit specific needs, interests, and rights, with three main goals of: 1) minimize harm and disruption to Nunavut's people and environment; 2) track and document research activities in and about Nunavut; and, 3) facilitate community consultation and engagement (Perrin, 2025; SC 1988, c.S-4).

Efforts have been made to consolidate and track licensed research activities in Nunavut (Perrin, 2025), through annual compendia (Nunavut Research Institute (NRI), 2024), reports of research trends (Beltrano et al., 2024; Polidoro et al., 2022; Rahman et al., 2024) and publicly accessible research portals (Isirvik, 2025; Polidoro et al., 2022). Most recently, the NRI (the issuer of the majority of research licenses in

Nunavut) has launched their Isirvik Research Portal, the territory's first digital research licensing repository (Isirvik, 2025). Isirvik means "an entrance" in Inuktut (the official Inuit language). It is designed to enable Nunavummiut, researchers, and decision makers to identify research leadership, location, topics, methods, and how researchers propose to share their results. Utilizing digital databases and portals can help both the NRI and RLR organizations manage research-related information, feedback/criteria, and reporting outputs (ITK, 2018a; Polidoro et al., 2024).

In Nunavut, licensing also acts as a mechanism to help facilitate (and occasionally compel) an extended iterative dialogue between researchers and impacted communities to adapt and modify research programs accordingly to Inuit concerns, priorities, and needs. This research license review (RLR) process is designed to increase community involvement and influence over proposed research (Beltrano et al., 2024; Gearheard & Shirley, 2007). If a project poses no risk to the physical or social environment, and no concerns are raised through the consultation process, the license will be approved (NRI, 2025). As research in Nunavut expands in scope and complexity (Polidoro et al., 2022; 2024, so have questions about community experiences with RLR (Gearheard & Shirley, 2007; Perrin, 2025; and, how research evaluation criteria, license conditions, and projects outputs are managed and implemented in practice (Inuit Tapiriit Kanatami (ITK) 2018a).

Previous studies have identified opportunities to improve the research licensing process in Nunavut, through "community research advisors or other personnel" (Perrin, 2025: 96) as a mechanism to improve consultation measures and to better track and monitor research. Currently, external researchers' efforts to engage

community members are not routinely evaluated or audited to assess their impact or effectiveness. Moreover, the NRI typically waives the licensing requirement for community-led research that does not entail the production of academic or scholarly outputs. As a result, some important community led research is undocumented and not readily accessible to the public (Perrin, 2025).

To better understand community experiences and engagement with RLR, we began with a survey with 20 RLR organizations in Nunavut (Beltrano et al., press). Our study revealed that almost half (45%) of the 20 RLR organizations who completed the survey do not review all applications received, and only some (35%) are compensated for their time reviewing (Beltrano et al., 2026; 2024). Our survey also revealed an ongoing demand for more resources to support RLR organizations and more engagement with researchers directly, including access to research reports and outcomes (ibid.).

While the survey was a helpful baseline, more consultation was needed to further our knowledge about community experiences with RLR. To act on this, we undertook 16 semi-structured interviews with representatives of RLR organizations across Nunavut, with the goal of understanding: i) priorities and concerns related to research, ii) challenges with review, iii) opportunities to improve review processes, and iv) license reporting.

Through our interviews, we aim to identify if research licensing is meeting its goals, and where there are opportunities to put recommendations from RLR organizations into practice. Understanding community experiences with RLR aims to understand how

licensing authorities such as the NRI can improve existing policies, procedures, and protocols to foster more effective local engagement in the research governance. Additionally, the interviews identified resources and supports that RLR organizations require to facilitate their engagement in research review. Finally, we hoped to identify opportunities to improve how research is tracked and managed in the territory. Our efforts aim to be contributing towards the initial steps of making research licensing better serve the needs of Nunavummiut

3.1.1 Research licensing background and criteria

Across Inuit Nunangat, the licensing and permitting requirements for research are variable and complex by region, but all include a mechanism to support Inuit consultation and engagement in research approval process (ITK, 2018a; b; ITK & NRI, 2007; Perrin, 2025; Polidoro et al., 2024). In the Northwest Territories, the Government of Northwest Territories (GNWT) utilizes a formal online application system requiring plain language summaries and gives RLR organizations three months to review an application (GNWT, 2024) Nunavik is currently developing their own application and review process through Attaniuvik, the regions newly created research governance mechanism (Polynya Consulting Group (PCG), 2022). In Nunatsiavut, research approvals are governed through the Nunatsiavut Government Research Advisory Committee, rather than a formal application process. Visiting researchers are required to engage with community members to ensure research responds to community values (Nunatsiavut Government, n.d).

All research being conducted in or about Nunavut Territory is subject to the approval of a license, permit, or authorization under one or more Acts of legislation, including the Fisheries Act (RSC 1985, CF-14), Scientists Act (SC 1988, c.S-4), and Wildlife Act (SNu 2003, c26) (Beltrano et al., 2026). The Scientists Act specifically applies to all research involving air, land, water, or people in Nunavut, and outlines the requirements to secure a scientific research license before proceeding with any such research. Ministerial responsibility for the Scientists Act has varied over time, as successive governments have reassigned legislation to different Ministers. Typically, the Minister responsible for Nunavut Arctic College (NAC) is also the Minister responsible for the Scientists Act. The minister holds the authority to appoint a Science Advisor to carry out the duties and responsibilities assigned to the Minister under the Act, including the administration of scientific research licenses. Since 1995, NAC's Senior Research Officer has served as Science Advisor through successive reappointments, in accordance with a Government of Nunavut policy that delegates administrative (but not legislative) responsibility for the Act to NAC (Beltrano et al., 2026; NRI, 2025; J. Shirley, personal communication, October 24, 2025).

To support the review of incoming research license applications, some RLR organizations who participate in RLR have their own priorities when reviewing applications, for example, through prepared checklists, criteria, or guidelines. Applications are evaluated on topics such as community consultation (and agreements with the researcher), appropriate methods, potential harm, risks and benefits, compensation, tracking and storing research data, and effectiveness of

reporting (Aqqiumavvik Society, 2024; Beltrano et al., 2026; ITK, 2018a,b; NRI, 2025; Panel on research ethics, 2022; Qaujigiartiit Health Research Centre (QHRC), n.d). While all RLR organizations are subject to review requests from the NRI, not all organizations have the capacity, or resources to participate in RLR, or establish RLR protocols or criteria of their own. Through our own semi-structured interviews, we investigate the effectiveness of current research licensing regimes in Nunavut, while developing an understanding of how research licensing is meeting its goals, and what needs to be done to put opportunities for improvement into practice.

3.2 Methods

This study was facilitated in partnership with the NRI as a follow-up to our previous investigations of research trends in Nunavut (Polidoro, 2022; Polidoro et al., 2022; 2024; Rahman et al., 2024). It also expands on an initial survey of community experiences with RLR in Nunavut (Beltrano et al., 2026; 2024). The development and facilitation of interviews is closely guided by the Piliriqatigiinniq Partnership Model for community health research (Healey & Tagak, 2014; QHRC, 2019) (see Section 1.3.2). To build on survey results we worked with the NRI to co-develop the interview guide. This aimed to an opportunity for RLR organizations to share stories of their processes and experiences (QHRC, 2026).

3.2.1 Semi-structured interview development

Interviews were held with representatives of RLR organizations to facilitate in-depth discussions about their experiences with RLR in Nunavut (Beltrano et al., 2026;

2024). Survey responses from RLR organizations helped frame the topical focus of our interview guide, including priority areas related to research, challenges associated with reviewing applications, opportunities for research, research reporting. Focusing on these 4 main themes was essential to our goal of streamlining the current RLR process to better support NRI's administrative processes and research results for Nunavummiut. A semi-structured interview format was important to ensure the interview would not be too long to avoid potential fatigue (Ben-Nun, 2008; Jeong et al., 2023). With these considerations, an interview guide was initially drafted by author Beltrano in late Spring 2023. Various iterations of the interview guide were updated after consultations with project partners and co-authors during Summer 2023. Once finalized in Fall 2023, the interview guide included 11 questions, focusing on: i) priorities related to research, ii) challenges with review, iii) opportunities to improve review processes, and iv) license reporting.

3.2.2 Identifying and recruiting reviewers

To ensure a broad range of perspectives, all (n=60) RLR organizations in Nunavut were invited to participate and share their experiences. We aimed to have balanced geographic and disciplinary representation from RLR organizations who have experience reviewing Physical, Health, and Social Science licenses (Polidoro et al., 2022; 2024). We also recruited individuals who held positions or roles for organizations where they were responsible for coordinating or completing RLR, even if they were no longer working for the organization.

Author Beltrano distributed an initial email invitation (recruitment letter) to the same list of organizations that were invited to complete the earlier survey (Beltrano et al., 2026; 2024). This included all RLR organizations that the NRI regularly engages with to review of scientific research license applications. The NRI also provided contact information for 7 individuals (n=5 current, and n=2 former reviewers) to include in the recruitment process.

Author Beltrano followed up with the previous recruitment letters shared (from surveys) and inquired about the potential interest in participating in an interview as part of this ongoing research project. A letter of information (in English, Inuktitut, and Inuinnaqtun) was distributed as part of this recruitment effort. The 7 individuals that were suggested by NRI were given an overview of the entire project, as they were not involved in survey recruitment. If no email reply was received within two weeks, Beltrano followed up by phone and/or email to be sure RLR organizations received the email invitation, to answer any questions, and/or to provide support. There were challenges observed in the recruitment process regarding low response rate, as it was difficult to contact RLR organization offices, due to staff turnover and invalid emails, full mailboxes, or phone lines being out of service. As a result, 16 total interviews were completed.

3.2.3 Interview facilitation

Interviews took place between September and December 2024. Interviews were primarily conducted virtually (telephone and MS Teams) due to time and

financial constraints of travelling to communities across Nunavut (Bolderson, 2012). However, some in-person interviews were also conducted in Ottawa at the Arctic Change Conference in December 2025. Interviews were conducted in English, however Inuktut interpretation was offered. Skilled interpreters (Inuktitut or Inuinnaqtun) were available if requested by reviewers. If the interview was not within the scope of their paid work duties, Reviewers were also compensated for their time in sharing their knowledge and expertise. Interviews ranged from 30 to 60 minutes. Interviews that were completed in-person or by telephone were audio recorded using a handheld audio recorder or by written notes. Audio recordings were transcribed manually, verbatim. Virtual interviews conducted using Microsoft Teams were recorded and transcribed within the Teams application. Automated transcriptions were reviewed and corrected by reviewing the audio files. Member checking was conducted by emailing reviewers a copy of the interview transcript to validate the accuracy of the interview transcript (Henri et al., 2019; ITK, 2018a; ITK & NRI, 2007). Participants had two months to opt-out upon receiving the transcription of the interview.

3.2.4 Interview participants

Of the 16 interviews completed, 6 participants were from a community research organization (CRO), 4 from the Government of Nunavut (GN), three from an Inuit Organization (IO), two from Hunters' and Trappers Association/ Organization (HTO), and one participant from a Hamlet office (HAM) (Figure 3.1). Half of reviewers had reviewed NRI research license applications for over 5 years (8 reviewers), followed by 1-2 years (5 responses), and less than one year (n=3). Most (9) review NRI

research license applications for Nunavut-wide projects, followed by projects exclusively undertaken in the Qikiqtani (n=3) and Kivalliq (n=3) regions, and Kitikmeot region (1).

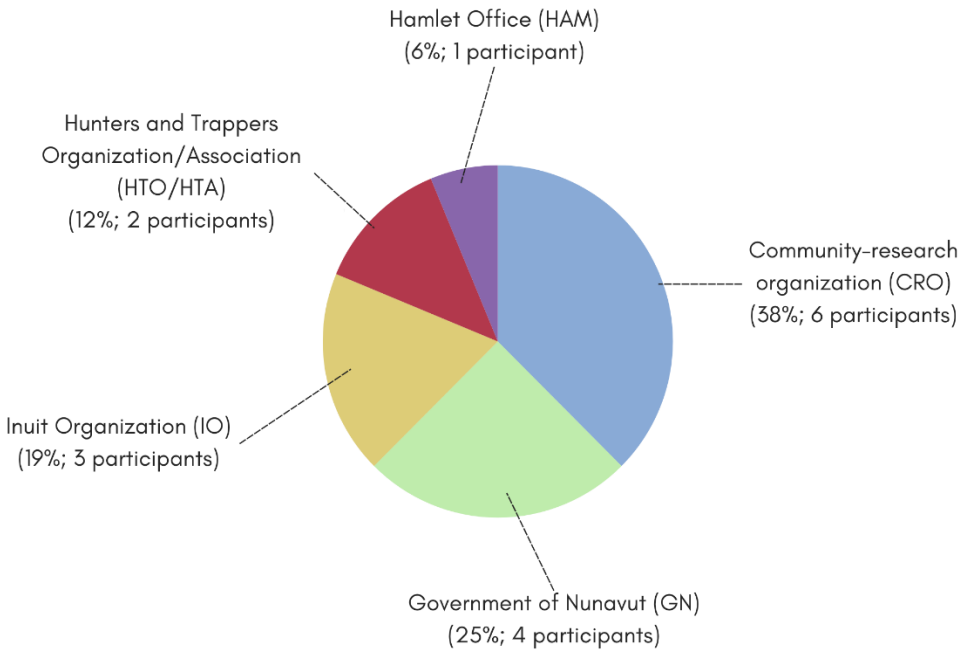


Figure 3.1: Interview participant organization affiliation

At the time of the interviews, 14 reviewers were currently affiliated with an RLR organization. Of the 14, 12 reviewed NRI applications as part of their role within the reviewing organization, while 2 reviewers represented a reviewing organization (i.e. HTO), but did not actively participate in the review of applications. 2 reviewers were past reviewers (meaning they were previously employed by a review organization and participated in RLR). 1 interview was conducted with 2 participants due to a staffing transition, during which both the outgoing and incoming role-holders were present. Throughout results, quotes are attributed according to review organization type (e.g. the second HTO representative interviewed would have the code HTO2) (Figure 3.1).

3.2.5 Interview Thematic Analysis

To facilitate thematic coding, each of the 16 interview transcripts were imported into NVivo (Version 14) qualitative analysis software. Thematic content analysis involves identifying common themes across the interview transcripts from different RLR organizations (Friese et al., 2018; Nowell et al., 2014). Thematic coding of interview transcripts can inform research licensing and organization procedures, as similar responses were grouped together and communicated to the NRI.

An initial coding framework was established based on 4 key objectives of the interview guide (see Introduction): i) Challenges regarding research license review, ii) priorities for research in Nunavut, iii) opportunities, and iv) reporting. Then, author Beltrano identified emerging themes and developed 50 sub-themes. After consultation and iterative discussions with co-authors, Beltrano established high-level main themes to aid in categorizing the sub-themes from the coding process. Each key objective has 4 main themes, except for reporting (which only has three main themes), and 3-6 sub themes that follow. For example, the key objective "opportunities" has 4 main themes, including: i) to better support community engagement, ii) to enhance RLR, iii) to facilitate capacity building, and iv) investing in technology and personnel. Opportunities to facilitate capacity building include three sub themes: compensating communities, employment, and training opportunities (See Appendix 3.1).

3.2.6 Coding interview responses: Matrix query analysis

Matrix-coding query analysis using NVivo 14 was used to better understand the dynamic interaction between themes (Dhakal, 2022). To best identify who is responsible for acting on emerging priorities, challenges and opportunities related to research licensing and reporting, we also coded sub-themes to a specific stakeholder. The stakeholders are regarded as the groups responsible for implementation of the sub-themes, including researchers, RLR organizations, or the NRI. The stakeholder's responsibility for each theme was identified based on the interpretation of key themes raised in interviews. For example, research priorities and challenges with RLR were discussed as the responsibility of all three stakeholders. Opportunities to improve RLR processes were linked to the NRI and researchers (Table 3.1). The "wizard" function was used (Polidoro, 2022) to deploy the matrix query, using the key theme and sub-themes of each opportunity, priority, and challenge. The outputs (as shown in the results section and discussion) include the number of references and overlap for each theme, sub-theme, and stakeholder responsible for acting on the themes. The theme "reporting" was intentionally excluded from the matrix query due to its overlap and relevance to research priorities, opportunities, and challenges with review. Reporting is discussed separately in the results and discussion section for a more refined and focused analysis.

3.3 Results

3.3.1 Research priorities

Throughout the semi-structured interviews, one of the key priorities was ongoing concerns related to RLR. Throughout the interviews, there were 151 total references to a specific priority for research in Nunavut, most related to: community relevance and engagement (72 references), followed by logistical concerns (50 references), research quality and clarity (16), and research ethics and governance (13) (Figure 3.2).

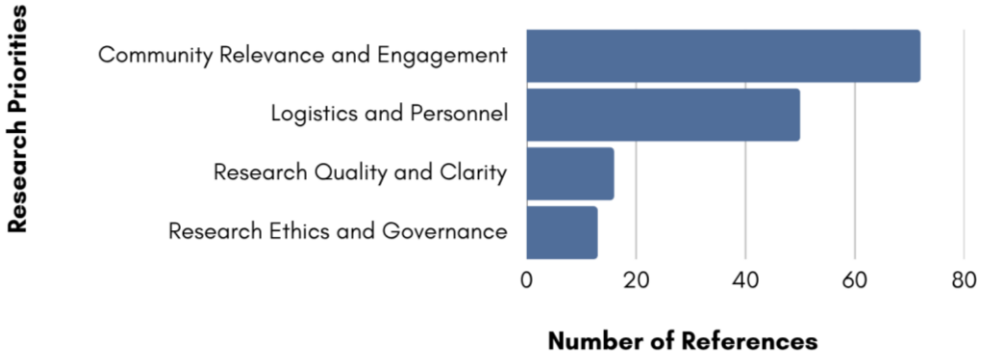


Figure 3.2: Distribution of priorities with reviewing applications

3.3.1.1 Community relevance and engagement during research license review

Reviewers emphasized the need for researchers to prioritize the level of community engagement (n=34 references) in research projects. When considering community engagement (Figure 3.3), a GN representative discussed the ongoing challenges with "research taking place when there's no fulsome engagement with people [or decision-makers] in the community" (GN1). Researchers are travelling to communities, investing in instrumentation for their projects, but "haven't even consulted with the

community" (GN1) about the research they are doing, or plan to do. Furthermore, the level of engagement proposed in applications is another priority area, as reviewers describe some applications not having "enough information on how they're going to be doing the engagement" (GN2). Reviewers discuss the use of engagement as "a buzzword, and [researchers] haven't provided any level of detail on what exactly [that engagement] looks like" (GN2). Furthermore, project relevance/community benefit of proposed projects, understanding of local knowledge and Inuit Qaujimajatuqangit (IQ), and co-development of research license applications were also mentioned priorities. To learn from communities and develop meaningful relationships, one interviewee suggested that researchers take an IQ workshop with their organization to help gain knowledge on how to do research with Inuit (CRO1).

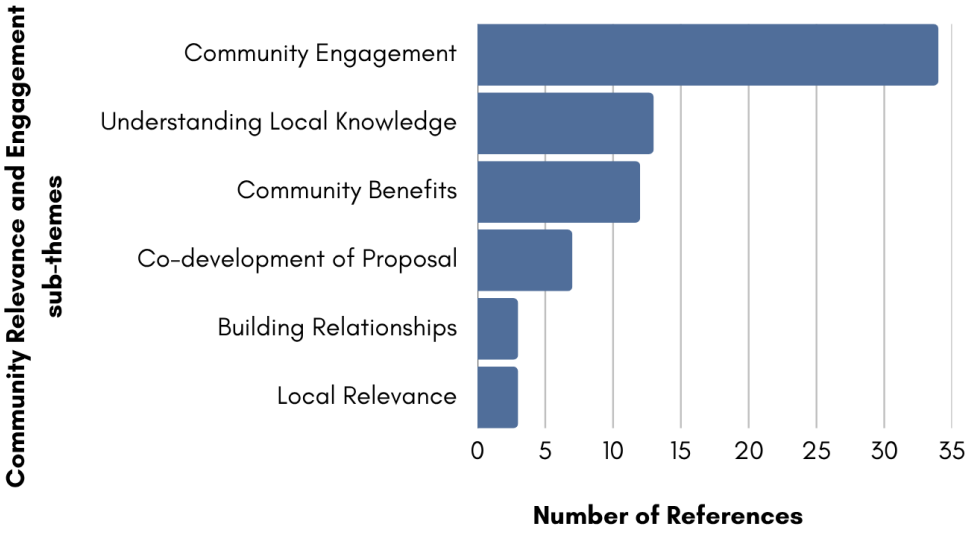


Figure 3.3: Distribution of community relevance and engagement sub-themes

3.3.1.2 Research license review logistics and personnel

Local capacity (n=18) was the most referenced sub-theme related to logistics and personnel (see Appendix 3.8). One Interviewee recognized the importance of RLR, however, noted they "are so stretched" (IO1) making it a challenge to review applications. They would like to build capacity within their organization to increase support for both administrative duties and RLR. Reviewers described community burnout because of local capacity issues, due to the duplication of research and research fatigue from being over-studied. This was further expanded via discussion on duplication of research, and how it can "exhaust this really limited group of elders with this knowledge remaining" (CRO2). The interviewee further explained that when elders are tied up in many projects of similar focus, the community is draining "of people who can be teaching the youth" as they are being hired by the federal government or researchers to work in these facilities. Reviewers also emphasized funding as an important logistical priority. RLR organizations want researchers to communicate on their applications how funds are being distributed to communities, and who is funding their projects. Funding was also discussed as a resource to help support community capacity. It was suggested that researchers should "invest in an organization that's already doing [research]" (HTO1).

3.3.1.3 Quality and clarity of research license applications

Reviewers noted the lack of plain language (n=7) in applications as a key priority related to research quality and clarity. Reviewers shared that some applications are "definitely too technical", specifically in environmental and health areas (CRO4). Reviewers expressed challenges regarding the review of overly

technical applications, as some proposed projects include terminology for certain organisms outside of their expertise. Reviewers also expressed concerns over the clarity in methodology sections of research license applications, as they "spend so much time trying to figure [the methods] out" (IO1). Additionally, reviewers who vocalized concerns over missing information identified the need for more detail from visiting researchers regarding community involvement and engagement. It was discussed that when information is missing from an application, they often need to contact the licensing manager at NRI to help liaise with researchers to address this gap (GN2; GN3).

3.3.1.4 Research ethics and governance

Reviewing informed consent forms for health and social sciences research was an important theme (n=4) discussed in relation to research ethics and governance. There were broad concerns about the organization and collation of applications and supporting documents, and CRO3 suggested the need for more quality control by NRI prior to forwarding application packages to reviewers. Additionally, the inconsistencies of multiple consent forms within applications was discussed (CRO5). Other priority areas related to research ethics and governance included privacy (protecting participant identity), and the superficial nature of some researchers claiming to practice community engagement. Reviewers describe this as instances of "box ticking", where researchers are fulfilling their research licensing requirements without proper and genuine engagement from the communities (CRO2). Reviewers note that box ticking is an example of researchers who "don't care about [meaningful engagement]" and would rather find a more efficient means of fulfilling NRI licensing obligations (GN2). An example of box-

ticking in research would be sending an email to an HTO office informing them of the proposed research, while offering to write the letter of support to submit the application, thus eliminating the community consultation period to discuss the project's application. Additionally, reviewers described the importance of researchers needing to better explain risk and harm within their applications. For example, CRO4 reflected on the differing interpretations of "emotional or trauma triggers" between medical doctors and other research practitioners. They discussed that applications submitted by medical doctors frequently portray their research as universally beneficial, while Inuit or Nunavummiut-based review organizations evaluate the risks in a different, or contrasting manner.

3.3.2 Challenges with review

Challenges with RLR were another key focus of our semi-structured interviews. There were 88 total references to challenges, which were categorized into 4 major themes: administrative challenges (35 references), logistical challenges (26), scope and relevance (15), and expertise-related challenges (12) (Figure 3.4).

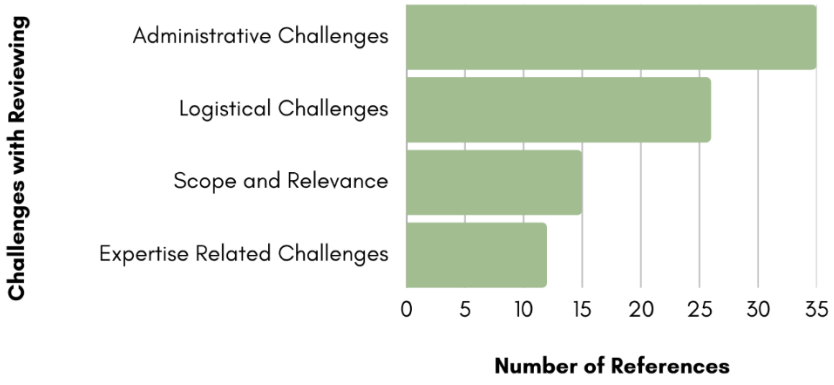


Figure 3.4: Distribution of challenges with reviewing applications

3.3.2.1 Administrative challenges

The most common administrative challenge experienced by reviewers was competing interests within their organization (Figure 3.5). From an HTO perspective, at "board meetings, there is never enough time to go through [the entire agenda], and applications do not make it to the topics of things to be reviewed" (HTO1). Other administrative challenges included inconsistencies in document content and labelling, and missing documents (i.e., consent forms, or recruitment materials). One reviewer elaborated on this by describing the challenge of managing supplementary materials in research license applications due to inconsistent labelling of documents across application packages (CRO5). To address this challenge in the application process , one reviewer proposed the use of an application portal through the Isirvik platform as an online and interactive tool for managing research application documents (CRO3). Another detailed "that a portal would be beneficial, because I do find it hard to manage [application documents]" that are otherwise shared on a USB drive, without a systematic file naming convention (CRO5). Other administrative challenges associated with RLR include project summaries being too technical for a quick review.

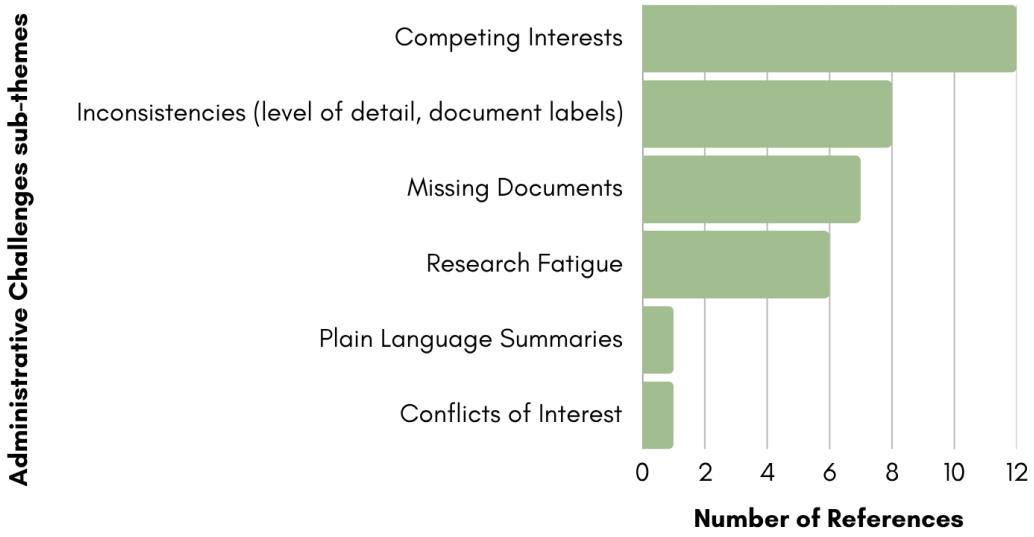


Figure 3.5: Distribution of administrative challenges sub-themes

3.3.2.2 Expertise-related challenges

Reviewers express the lack of expertise available and limited staffing as a key challenge to undertaking RLR. One reviewer mentioned that their organization is "missing a lot of guidelines" around how to conduct RLR of certain projects, for example, with a clinical focus (GN3). An HTO representative elaborated by explaining how some HTO members are often "not trained or do not understand the research" making it challenging to review applications. Furthermore, limited staffing is a key challenge, as one community organization representative discusses how their "very little staff capacity" limits the amount of expertise available to participate in RLR.

3.3.2.3 Logistical Challenges

Time constraints were the most common logistical challenge highlighted. Some review organizations (i.e. HTO offices) become overwhelmed with their regular duties in

certain seasons where hunting tags are released. For example, during a hunting season where tags are released, HTO's prioritize their time (for example, during board meetings) planning for the distribution of tags to community members rather than RLR. A similar experience was had from Inuit organizations, where they explained that it is difficult to gather people to meet during certain times of the year, slowing down RLR (IO3). Other reviewers felt there was not enough time in the day to both complete their own work and review NRI applications. One reviewer explained how they did not receive documents ahead of time before meeting to discuss applications (HTO1), while another was not checking their emails regularly (GN1).

3.3.2.4 Scope and relevance

Some community review organizations are unfamiliar with NRI's processes and protocols for reviewing and approving research licensing applications, despite being part of the RLR process. A reviewer suggested that "NRI could provide some guidance on when to put terms and conditions" to help clearly communicate expectations for reviewers (IO3). Another RLR organization representative was not sure about the stakeholders NRI sought comments from (e.g. individuals vs. organizations) in the review process (IO2). Another reviewer (CRO2) found it challenging to review projects that are typically outside of their expertise (e.g. Sea Algae). This was supported by another reviewer who discussed the challenges of being a qualitative health researcher who receives clinical applications for review (CRO4). Related to project relevance, one reviewer revealed they review select projects that they are familiar with or are interested in learning more about (GN2).

3.3.3 Opportunities for research license review

There were 114 references related to opportunities for research, including administrative enhancements (51 references), facilitating capacity building (30), better support for community engagement (19), and enhancing RLR processes (14) (Figure 3.6).

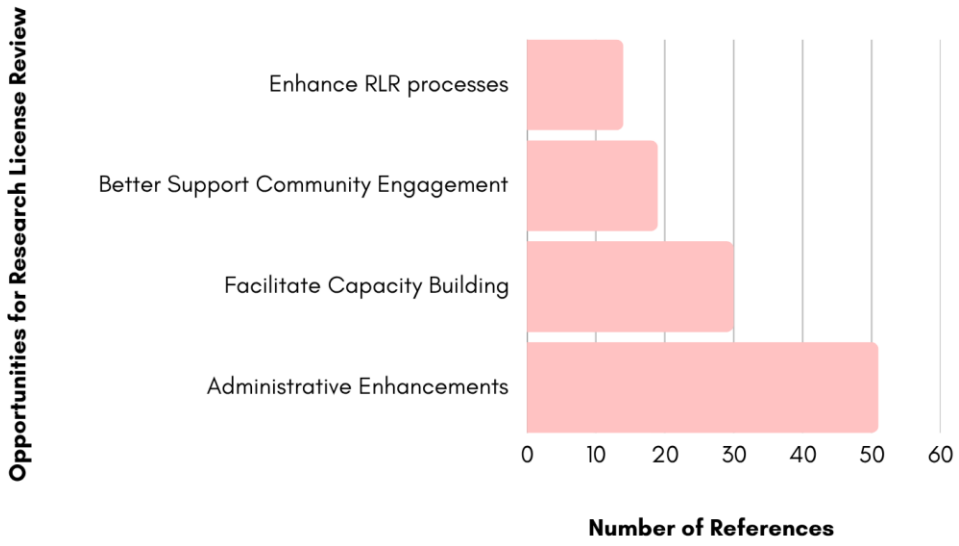


Figure 3.6: Distribution of opportunities for reviewing applications

3.3.3.1 Administrative enhancements

There was common emphasis on creating one or more research liaison positions in Nunavut (Figure 3.7). One reviewer suggested there be a research liaison position developed to "connect researchers with existing pockets [of research]" and proposed how a liaison would support connections and networking at the community level (CRO4). From an HTO perspective, it was suggested there needs to be "one [liaison] for each region" (HTO1), while community research organization perspectives noted

there "probably needs to be a research liaison person for health, environment, and social science" (CRO4). A reviewer also described the role of a research liaison to "be a mediator and help explain [scientific terminology within applications to community members]" (HTO1). An additional administrative opportunity identified by community research organizations included incorporating technology into RLR, for example, patching in audio and visual rather than writing feedback for an application (CRO2).

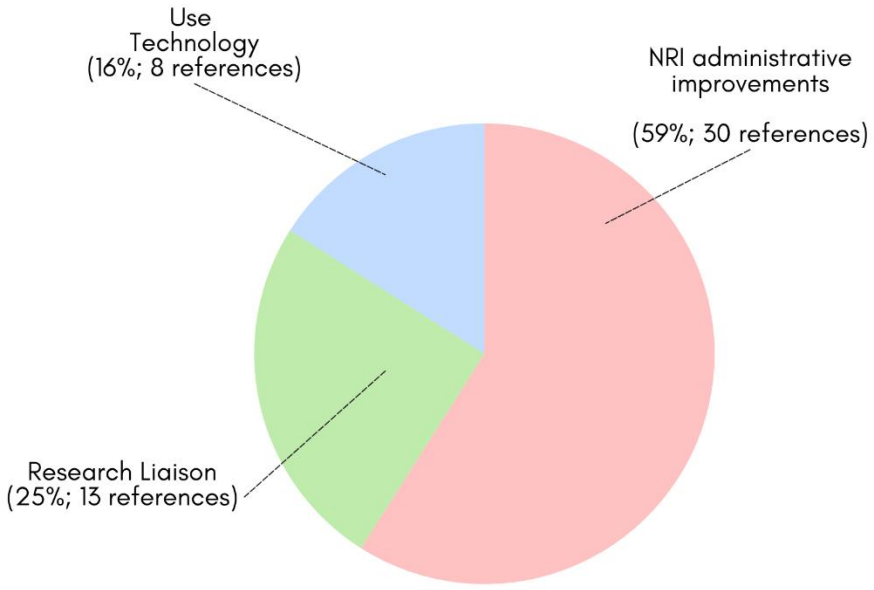


Figure 3.7: Distribution of administrative enhancements

3.3.3.2 Facilitate capacity building

Reviewers identified the need for training opportunities for both reviewers and researchers. For RLR organizations, training is needed to better understand NRI's expectations and processes for reviewing research license applications. Inuit organization perspectives emphasized training on how to develop checklists of criteria to

support RLR (IO1). Furthermore, training opportunities for community-based researchers were also discussed. A community research organization representative noted how they have previously facilitated terminology workshops to understand the concepts and ensure mutual understanding between researchers and community members (CRO1). Other reviewers suggested that training materials should inform researchers about community engagement, compensation, incorporating feedback, and results sharing with the community.

3.3.3.3 Better support for community engagement

Researcher consultation with the community was the most referenced opportunity (n=11) to support community engagement. One reviewer explained the benefits of researchers travelling in person to share their ideas (HTO2). This was supported by another reviewer who suggested virtual 10 to 15-minute discussions with researchers as part of RLR, and to meet the researcher, understand their intentions, and see "whether it's a good fit for their community" (CRO2). This reviewer also discussed how the Isirvik research portal could help facilitate engagement. For example, how the portal can incorporate a feature where community members (ex: Elders) can "hit the microphone button and record" their comments rather than writing them down on a document.

3.3.3.4 Enhance research license review processes

Reviewers suggested tracking and monitoring research projects as an opportunity to enhance the RLR process. A reviewer suggested that if applications were submitted, processed and reviewed in an online portal, having analytics on the research license

application could help track who is engaging with the applications, and what parts of the research license application are most viewed/downloaded (CRO2). Representatives from both a community research and regional Inuit organization noted the value of connecting applications to an interactive mapping interface to the application form, to help locate specific remote research locations outside of communities (CRO5; IO2). Additionally, another review proposed using the Isirvik research portal for real-time research updates, as a tool to help community members identify activities around their homeland and to receive quick status updates (CRO5). Another reviewer further explained the value of providing real-time updates for research activities taking place in communities, to help answer questions and concerns around "why there's helicopters flying near our cabins" (IO2).

3.3.4 Reporting

There were 58 references to how research results are reported, relating to the quality of reporting outputs from projects, and how they can be accessed. From an Inuit Organization perspective, the importance of translated reports "that are accessible in terms of whether the information can be understood, and in [the appropriate dialect]" was emphasize (IO1). Additionally, Inuit organization perspectives suggested that the quality of reporting is impacted by how easily it can be understood at the community level (IO2). A reviewer discussed how they would like to see more accessible, simple, future-thinking reporting, such as social media clips and short videos that can be easily interpreted by youth (CRO3). Another reviewer who proposed including links to project videos in their reporting GN1), while other reviewers discussed the value of Facebook and

social media and posts as good quality reporting that is impactful to communities (CRO1; IO1).

Furthermore, reviewers identified a lack of access to final reporting outputs from researchers and expressed interest in seeing more final outputs being shared with the review organizations. One reviewer described the desire for researchers to sit and come chat to discuss the findings from their projects (IO3), while another expressed the value of mandating results sharing "for [researchers] to submit things back to the community" (CRO5). One reviewer stated they "really like when [researchers] share the results to the communities" (CRO3), while another noted how it is important for research results to be a continuous stream, and for ongoing initiatives to contribute to the wellbeing of communities (CRO1). The idea of updating the Isirvik research portal to accommodate research reporting outputs was also discussed by RLR organizations. A reviewer reflected on the idea of Isirvik being "a place where [researchers] could share [journal articles] because there is no way for me to [access these documents] in a systematic manner" (GN3). Another reviewer discussed how, through Isirvik, an interactive review portal would allow for streamlined communication between researchers and RLR organizations to review research and provide feedback (CRO2).

3.4 Discussion

Interviewing representatives from RLR organizations from across Nunavut helps inform our interpretation of how (or if) research licensing in Nunavut is meeting its intended goals of 1) community consultation and engagement, 2) tracking and monitoring

research, and 3) minimizing harm (Perrin, 2025). Seeking community reviewer perspectives via interviews was critical to gain insight into the effectiveness of RLR processes in meeting the goals of licensing. We used a matrix query to help identify stakeholder responsibilities in strengthening RLR processes. From Table 3.2, we see that RLR organizations identified researchers as being primarily responsible for addressing research licensing priorities. Challenges related to research licensing highlight joint responsibility between RLR organizations and the NRI, while most opportunities identified for improvement are considered to be the NRI's responsibility. This table helps to ground our discussion as we reflect on the goals of research licensing with respect to our interview findings and relevant literature.

3.4.1 Does community consultation in research licensing help to achieve self-determination in research?

While the NRI's existing research consultation ensures that impacted Inuit groups are informed about proposed research and have an opportunity to influence the terms and conditions under which it proceeds, it does not necessarily enable meaningful Inuit self-determination in research. Partly this is related to limited NRI capacity, and mostly this is related to researcher accountability and commitment to community-engagement.

NRI's research licensing team is small (2 people), and the volume and increasing complexity of research applications that must be process each year create challenges in ensuring thorough, effective, and consistent consultation for every project. In 2025 for example the NRI issued approximately 170 licenses to projects in the health, natural and

social research disciplines (Isirvik, 2026). Community consultation efforts undertaken by administrative bodies such as the NRI, when they are not directly involved in conducting the research, are inherently limited and cannot serve as an effective substitute for direct engagement by the researchers who carry out the projects and must build relationships with impacted communities.

Table 3.2: Number of times each theme was mentioned with respect to specific stakeholder role/responsibility

Priorities for research licensing			
	NRI responsibility	Researcher responsibility	Reviewer responsibility
Community relevance and engagement	7	63	7
Logistical concerns	9	28	12
Research ethics and governance	3	11	1
Research quality and clarity	3	10	3
Challenges related to research licensing			
	NRI addresses challenge	Researchers address challenge	Reviewers address challenge
Administrative Challenges	17	15	13
Expertise related challenges	2	2	11
Logistical Challenges	4	5	17
Scope and relevance	12	0	2
Opportunities for research licensing			
	Opportunities for NRI	Opportunities for researchers	Opportunities for reviewers
Better support community engagement	3	7	6
Enhance research license review processes	12	1	0
Facilitate capacity building	21	8	4
Administrative enhancements	37	6	6

Researchers have important direct responsibility to provide opportunities for such engagement (Table 3.2). At the international level, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) highlights researcher responsibility to mobilize their findings in a way that it can be passed down to generations (Ignace et al., 2023). Additionally, the Inuit Circumpolar Council (ICC) calls for researchers to take responsibility for building trust with, and meeting the obligations set by the community (ICC, 2022). At the National level, the Panel on Research Ethics updated their Tri-Council Policy Statement, including a chapter on research with Indigenous communities and equal opportunities for engagement (Panel on Research Ethics, 2022). Additionally, the National Inuit Strategy on Research calls on researchers to align their projects with Inuit research priorities (ITK, 2018a). Ultimately, it is the responsibility of the researcher to learn about community context and priorities, to ensure research questions and approaches are relevant and appropriately engage community members and organizations. Researchers can also become familiar with and address these calls to action to improve researcher accountability and to respond to this overwhelming priority identified by RLR organizations.

The NRI's guide for applicants explicitly mentions that researchers are permitted to travel to Nunavut without a research license "for the purpose of meeting informally with community members" (NRI, 2025: 9), thus encouraging researchers to participate in engagement activities aimed to gather feedback and co-develop the proposed research. Some researchers are practicing this already by co-identifying emerging priorities such as science literacy in local youth (Sadowsky et al., 2022). In resource development, community engagement has played a critical role in building rapport,

understanding community concerns, and streamlining license and permit approvals (Prno et al., 2020). There are also many other examples of collaborative research throughout Nunavut, for example, in Kivalliq (Johnston, Tagalik, & Amarudjuak, 2022; Tagalik et al., 2023), Qikiqtani (Polidoro et al., 2024; Thompson, 2024), Kitikmeot (Kikkert & Lackenbauer, 2021; Ljubicic et al., 2021), and Nunavut wide (Caughey et al., 2022), where community members are engaged in all stages of the research. Through engaging communities outside of licensing requirements, researchers are working towards developing a more meaningful project in true collaboration with community members. If researchers continue to do this, they are addressing RLR concerns related to consultation and engagement (Table 3.2), and therefore, will be connecting to local research priorities, and building relationships.

Currently, community-researcher consultation is a top priority for review organizations due to the lack of ongoing engagement (Table 3.2; Beltrano et al., 2026), therefore, organizations are creating their own community-engaged research protocols, methodologies, or requiring pre-screening. The Aqqiumavvik Society, based in Arviat, Nunavut adopted their own Aajiiqatigiingniq Research Methodology (Carter, Tagalik, & Ljubicic, 2025; Ferrazzi et al., 2020), where any incoming researchers must be willing to learn how to implement this methodology if interested in applying or a scientific research license in collaboration with the organization. The Qaujigiartiit Health Research Centre (QHRC), that is based in Iqaluit, Nunavut, has previously developed the Eight Ujarait (Rocks) Model that was informed by the community as a guide for responding to youth wellness and mental health priorities. From this model, researchers

can turn to the key rocks (Ujaraq) to support their research, including practices of connecting knowledge and skills on the land, healthy and harmonious relationships, and fostering community and personal wellness (Healey et al., 2016). The QHRC is also guided by the Piliriqatigiiniiq Partnership Model for Community Health Research, with a focus on doing good, synthesizing knowledge systems, and storytelling (Healey & Tagak, 2014). Another community-based research model, known as SciQ, was established with the goal of creating better opportunities for science by helping researchers and communities work together (Pedersen et al., 2020). Researchers can incorporate the concept of SciQ into their research by: gaining community feedback and interest early, taking time to familiarize yourself with the community, having translated materials in advance, and engaging as many local organizations as possible (Pedersen et al., 2020). The information provided by these organizations is key for supporting consultation and engagement in research licensing, as researchers can adhere to the protocols and guidelines and foster these practices in their own research.

Research licensing agencies also experience administrative challenges to encourage and support engagement (Table 3.2). Opportunities were identified for research licensing agencies to encourage community engagement (Table 3.2). Currently, the NRI employs 2 individuals: the Science Advisor, and the licensing Manager to oversee and authorize the distribution of scientific research licenses (NRI, 2025; Beltrano et al., 2026; Polidoro et al., 2024). As the number of licenses administered by NRI increases each year (Polidoro et al., 2024; 2022), so will the review requests sent to RLR organizations (Beltrano et al., 2026). This raises concern about overseeing the level of community engagement in each

incoming application, as the capacity limitations in northern licensing agencies remain prominent (Nickels & Knotsch, 2015; Kuokkanen, 2020). To address these administrative challenges, modifications to the NRI research application form have been updated in late 2024 to describe their level of engagement taking place, however, licensing itself is not designed to replace all the engagement that is supposed to be taking place, and, the ability to oversee the engagement in each application remains uncertain. To help licensing agencies better understand community consultation in research, RLR organizations could coordinate efforts to identify community research priorities and make sure these are clear to the NRI and researchers to be used to inform new research projects and partnerships. Therefore, RLR orgs are communicating their priorities, researchers are encouraged to follow them, and there is less pressure on licensing staff to enforce community engagement (for example, if the RLR organization priorities were added to existing NRI guidelines for applicants).

3.4.2 Is research licensing meeting the goal of tracking and monitoring research?

It is the NRI's responsibility to systematically track the administration of scientific research licenses and monitor the annual progress of projects, and our research confirms that the licensing process is meeting this goal. Although tracking and monitoring research were flagged by RLR organizations as being among administrative challenges for the NRI to address (Table 3.2), overall, it was emphasized that research licensing is effective at keeping on top of what research is happening in Nunavut.

Our interview results revealed that RLR organizations are generally satisfied with how research is being tracked in Nunavut, specifically regarding how the Isirvik portal is tracking licensed research. The NRI produces annual compendia of licensed research (NRI, 2025) as another means of tracking licensed projects in a public manner, however the information in the compendia is limited to research project title, plain language summary, applicant name, number of team members, and research location(s) (NRI, 2024). Most recently, the public release of Isirvik supports public access to track and monitor research occurring in and around Nunavut communities (Isirvik, 2025). The NRI also utilizes an administrative interface of the Isirvik portal containing more in-depth information about research licenses. Any research license application that is submitted to the NRI is tracked through NRI's licensing manager and then uploaded to the Isirvik research portal for public access. Having the Isirvik research portal is a significant improvement to how research is systematically tracked in Nunavut.

While having a licensing portal is beneficial for the purpose of tracking research, RLR organizations are calling on NRI to implement administrative enhancements to support research tracking and monitoring (Table 3.2), such as incorporating a research application portal within Isirvik to help streamline how application packages are reviewed. This approach to tracking applications is already observed throughout other parts of the Canadian Arctic, the Northwest Territories has their own research licensing and application portal (GNWT, 2025). Additionally, Nunavik is working on creating their own research application registry (PCG, 2022) but has taken inspiration from Isirvik in their licensing database design and implementation. As web-based application systems are

proven to be more effective for end-users (such as NRI licensing staff) (Hussin et al., 2020), the NRI could re-structure the current Isirvik research portal to host application and review processes to improve the management and review of research application materials (Beltrano et al., 2026). This would address the logistical challenges and concerns experienced by RLR organizations (Table 3.2). To address these challenges, the NRI can adopt the online research registry process that is being implemented in Nunavik, where RLR organizations will be notified of projects for review, and will have the complete application package within the portal. To alleviate some of the burden with managing review within the organization (Table 3.2), automated reminders of upcoming review deadlines can also be sent to the RLR organization.

While developing a new interface to manage the review of applications is time-consuming and costly, the NRI can, in the meantime, update their current guide for applicants to inform researchers of potential delays in the organizational review process. This is already being done by the Nunatsiavut Government, where it is emphasized that their committee does not meet in August to review applications (Nunatsiavut Government, 2025). This can help address concerns regarding how RLR organizations effectively track and monitor incoming applications. Therefore, creating an enhanced licensing and application portal, there would be an important step in providing support for RLR organizations to more effectively track and monitor research activities, and engage in RLR activities (Nilsen, 2005; Perrin, Ljubicic, & Ogden, 2021).

One of the ways NRI aims to track and monitor research is through setting reporting expectations for researchers (NRI, 2025). The NRI cannot enforce reporting

under the Scientist's Act but do so via annual reporting requirements as a condition of approval for an NRI research license (NRI, 2025). These annual progress reports provide an opportunity for researchers to give a detailed overview of research activities, expenditures, and knowledge mobilization activities in the last year (NRI, 2025). Although any license holder is required to submit an annual report, these reports are not public, and while it helps the NRI monitor progress, the capacity of RLR organizations to review reports is uncertain. This is supported in our findings, as RLR organizations identify many researcher-focused priorities and challenges in the RLR process (Table 3.2). This is also supported in our initial survey investigations, where we learned that RLR organizations do not always receive reports, but would like to receive more from researchers (Beltrano et al., 2026; 2024). This raises complications around how research licensing is meeting the goal of tracking and monitoring research, when communities are not receiving research outputs. While tracking research approved research applications via Isirvik is effective, it is more challenging to track progress with past research due to inconsistencies in reporting (e.g. report format, length, accessibility, or even submission to NRI). To address this concern, the NRI updated their annual reporting format to include a 13-page comprehensive annual progress update to better understand the trends, outcomes, and impact of licensed research in Nunavut (NRI, 2025). This document ensures consistency and completeness of all fillable fields and is mandatory for all researchers seeking renewal of their research license in the next calendar year. Additionally, RLR organizations are permitted to request terms and conditions related to relevant research reporting. Such terms and conditions can include key findings from Carter, Tagalik,

& Ljubicic (2025), and Henri et al., (2020), where they identified posters, community events, and feasts as impactful forms of community-based reporting (Gearheard & Shirley, 2007). While both approaches are a step towards increased tracking and monitoring of research, RLR organizations continue to question enforcement from NRI in ensuring these terms and conditions are being met (Table 3.2). If NRI were to enforce terms and conditions requested by RLR organizations into the conditions of approval for application and renewal processes, the concerns about not receiving research results can be addressed, and so would the goal of tracking and monitoring research activities.

3.4.3 Is research licensing meeting the goal of minimizing harm?

Review organizations do not have the capacity to review all applications with the same level of scrutiny; therefore, it is unclear whether or not licensing is meeting the goal of minimizing harm (Table 3.2). All research is generally approved under the Scientist's Act unless the research suggests it may "unduly interfere with the natural or social environment of Nunavut" (SC 1988, c.S-4:2). If this is the case, several rounds of review and requests for changes may occur to ensure the research is not harmful. It is the RLR organization responsibility to evaluate the research and flag such physical or social interference, but the challenge identified in interviews is they often they cannot fully engage in the review process due to logistical, administrative, and expertise related challenges (Table 3.2).

Review organizations experience seasonal workload fluctuations and competing priorities certain times of the year, for example, HTO's need to focus on fishing during warmer months, and polar bear tag distribution in the fall, emphasizing the need for increased logistical support to track and monitor research (Amidon et al., 2023; Table 3.2). To address these logistical challenges, the NRI can impose quarterly review deadlines for RLR organizations, and quarterly submission deadlines for applicants. Implementing predictable review deadlines can increase opportunities for applications to be thoroughly reviewed by RLR organizations, specifically during busy seasons with competing administrative and community priorities, while researchers can be held more accountable for ensuring their applications are submitted on time to help facilitate a meaningful review. This can not only help improve researcher-community coordination but also contributes to minimizing harm in proposed research. The NRI can consult with RLR organizations to identify the appropriate time of year for RLR deadlines based on competing priorities and the discourse of what is best for the community (Inuit Circumpolar Council (ICC) 2023; Lavoie et al., 2022; Native American Centre for Excellence, n.d; Rink & Reimer, 2019).

Under current protocol, NRI automatically approves research license applications after 45 days, whether organizational feedback is received or not. As administrative capacity is limited (Table 3.2), many applications are being approved without RLR organizations having the opportunity to voice their concerns. This poses challenges as potentially harmful research (e.g. triggering research topics, inappropriate methods) are automatically approved without being reviewed (Ferrazzi et al., 2019; Healey

& Tagak, 2014; Henri et al., 2019). Longer review windows are already imposed in 2 regions of the Canadian North, where the Nunatsiavut Government allows for a 90-day review window (Nunatsiavut Government, 2025). The Yukon Government encourages researchers to similarly apply for a research license three months in advance to allow for organizational review (Government of Yukon, 2025). Increasing the review window can provide increased amount of opportunities available, and alleviate time pressures to complete a review, however, it is unclear if a longer review window will help reduce harm in research licensing, considering the ongoing capacity and staffing issues experienced by review organizations (Table 3.2; Beltrano et al., 2026).

There are expertise-related challenges experienced by RLR organizations (Table 3.2) specifically relating to technical applications, where specialized expertise is needed to review the application. Our interviews revealed how a research liaison can connect researchers with existing research networks and help bridge the gap in understanding scientific terminology in applications. The NRI does liaise with researchers for higher risk projects, however, a full-time liaison role can support both RLR organizations and the NRI by answering questions (CCA, 2023) about the application and broker partnerships for all projects in the early consultation and review stages of a project (Came, 2013). The need for a full-time research liaison reflects a broader recognition to help build local research capacity (Table 3.2) and increase clarification about applications, thus can help to minimize harm in projects. In Nunavik, Atanniuvik hired three community research liaisons to not only help facilitate community review committee (CRC) meetings but also ensure incoming research license applications align with community values (PCG, 2022).

Nunavut Tunngavik Incorporated have also taken their own initiatives to hire community advisors to help foster two-way communications and initiate consultations with community (Carter, Tagalik, & Ljubicic, 2025; Prno et al., 2021). This emerging reliance on liaisons highlights a trend towards recognizing the need to increase organizational capacity and community control over research licensing in Inuit Nunangat. Through hiring full time research liaisons, NRI can continue to work towards supporting research that is not harmful, addresses community needs, and contributes to Inuit self-determination in research (Beltrano et al., 2026; PCG, 2022).

Currently, there is a lack of formal governance structures and expertise (Table 3.2) in Nunavut to oversee research licensing. There is no territorial ethics board that exists in Nunavut to help govern the ethical conduct of licensable research activities. Without a Nunavut-specific research ethics board, the NRI relies on university ethics approval which may or may not be able to assess culturally appropriate ethics in an Inuit context. Researchers are only required to undergo ethics approval within their institution if they are academically affiliated, while government and industry-based researchers do not have to submit their research proposals through an ethics board (NRI, 2025). Additionally, some international researchers do not require research ethics review (Holm et al., 2011; van Teijlingen & Simkhada, 2015). This gap in the governance of licensed research raises concerns about research being approved without the consideration and review of an ethics review board. Without a research ethics review, applications are likely inadequate and can burden review organizations organizations by i) needing too many reviewer comments, or, ii) be too overwhelming to

review. Researchers who are unaware of research conduct from an Inuit perspective can also show up unexpectedly in the community. This poses additional expertise-related challenges for RLR organizations who do not have the ability to provide complex feedback or support visiting researchers (Table 3.2). Creating a standardized ethics review process is already being practiced in parts of Inuit Nunangat, where the Nunatsiavut Government established a Government Research Advisory Committee to complete the independent review of research in the region to ensure it aligns with Nunatsiavut priorities (Nunatsiavut Government, 2025). Additionally, in Nunavik, a representative from the Atanniuvik secretariat will complete an initial screening of incoming research proposals and liaise with researchers until concerns are addressed (PCG, 2022). In Nunavut, some community-based organizations such as the QHRC have established their own health research ethics checklist (QHRC, n.d). The NRI can advocate for a standardized research ethics review that considers projects from an Inuit perspective. This can also act as a safety net for RLR, considering the auto approval of research that is not reviewed within 45 days. The feedback from a territorial review can also be compiled by NRI and shared with RLR organizations to help support their own review processes.

3.5 Concluding Remarks

Territorial research licensing is designed to minimize harm, monitor research, and facilitate community consultation (Perrin, 2025; see Chapter 3.1). To better understand if research licensing is meeting its goals, we undertook the first-ever effort to learn about RLR experiences directly from the representatives involved. It was important to learn from RLR organizations to identify whether research licensing in Nunavut is meeting its goals

in terms of priorities, concerns, opportunities, and reporting in the RLR process. Key messages from our semi-structured interviews revealed that research licensing priorities for RLR organizations focus on funding and training to enhance community capacity and training for researchers. Challenges related to RLR included staffing shortages and competing interests, specifically focusing on time of year. The focus of opportunities for RLR included administrative enhancements at the NRI (Table 3.3). Through our interviews, RLR organizations have identified that research licensing does not effectively track and monitor research outputs (see Chapter 3.4), nor are the results received always communicated in a relevant way.

As we reflect on our interview results, we identified recommendations for research licensing priorities, challenges, opportunities, and reporting to help ensure that RLR is supporting Inuit self-determination in research, enhancing research protocol, and meeting its goals (Beltrano et al., 2026; ITK, 2018a).

3.5.1 Recommendations for improving community engagement

To help ensure community engagement and consultation in RLR processes, researchers can incorporate skills-building opportunities for community members in their projects (Table 3.3). This supports community engagement in research as communities may be incentivized to participate in the project. Researchers could include training opportunities and economic incentives to the community, which can be implemented through local hiring of elders as knowledge holders and providing training opportunities to youth who are eager to be involved in research (ICC 2022; Riddell et al., 2017). Researchers can share their expertise with locals and help provide community members

with the necessary skills to undertake research projects on their own (Pedersen et al., 2020). Providing training and skills-building opportunities also benefits researchers who may be able to collect valuable data or key takeaways from the research, while community members can experience economic advancements, for example, being paid to receive the training, and increasing employability via new training and skills acquired.

In addition, we also recommend researchers to communicate with communities directly when coordinating their research. This can be implemented by contacting communities to identify potential local research priorities or opportunities for engagement or viewing the Isirvik research portal for areas of research intensity and potential opportunities for new research. Contacting communities up-front provides an opportunity to build rapport with communities and identify the relevant research needs can also streamline the RLR process as RLR organizations will have a contextual understanding of the research group and project.

To further support consultation and engagement in RLR, we recommend NRI (and other licensing agencies) to provide orientation and training resources for researchers. Key curriculum in this training can include introductions to community research organizations, knowledge holders, and best practices for community engagement in research to ensure that they are equipped with the ability to conduct a successful community-engaged project (Table 3.3).

Table 3.3: Recommendations, potential impact, and stakeholder responsible for the three main goals of research licensing

Recommendations for community consultation and engagement		
Recommendation	*Potential impact*	*To do*
Update current guide for researchers to provide examples of meaningful consultation and engagement, and provide workshops and/ or training to explain the guide for researchers	Enhance research conduct via in-person training, including examples on how to meaningfully engage with communities	NRI
Provide training and skills-building opportunities for community members within their projects	• Incentivize communities to participate in research projects. • Mutual benefit to researcher (collecting data) and communities (economic advancements & addressing local priorities)	Researchers
Reach out to communities directly when developing a project, to help identify potential local research priorities or opportunities for engagement	• Establish rapport with communities prior to submitting the research license • Provides opportunity to identify relevant research needs	Researchers
Recommendations for tracking and monitoring research		
Recommendation	*Potential impact*	*To do*
Incorporate an application portal within Isirvik, and provide the necessary training for RLR organizations to receive and review incoming applications	Audit trail for reviewer comments, research progress, and amendments to the application	NRI
Hire temporary support staff during busy seasons	• Increase administrative capacity within the organization • Increased hours available to participate in RLR	RLR orgs.
Share annual reports, and final research outputs with RLR organizations directly	• Allows communities to identify progress, and provide feedback on the direction of a project • Increases transparency, build trust between community and researcher	Researchers
Recommendations for minimizing harm		
Recommendation	*Potential impact*	*To do*
Establish a territorial research ethics advisory/governance agency	• Standardized ethics review for each licensable project in the territory • Ensure research aligns with Inuit research ethics (not just Institutional ethics review guidelines)	NRI
Incorporate community-based reporting (community feasts, presentations, radio)	• Improving research conduct and increases community access to research results (not currently mandated in RLR guidelines)	Researchers
Revisit policy around auto-approving research licenses after 45 days	Reduces the potential of harmful research being issued a license without feedback from RLR organizations	NRI

3.5.2 How can research licensing help track and monitor research?

Research licensing in Nunavut contributes to tracking and monitoring research through the Isirvik research portal and annual compendia of licensed research. These mechanisms provide systematic tracking and public access to licensed research projects in the territory. A caveat to the current portal, however, is that its current state does not support the tracking and monitoring of licenses in a way that supports RLR. To address this challenge, we recommend that the NRI enhance the Isirvik research portal to incorporate the application and reporting stages of a project. This can improve tracking of review processes and ways feedback and terms are addressed. By incorporating these portals, RLR organizations would be able to access research applications in a more streamlined and traceable format, therefore supporting the tracking and monitoring of incoming applications and reports (Table 3.3).

We recommend for RLR organizations to hire temporary support staff during busy seasons where organizational capacity is limited. This would allow for increased capacity to review applications, and in turn, track and monitor incoming applications. Review organizations can turn to funding pots targeted towards increasing community capacity and improving local governance (ArcticNet, 2025; Beltrano et al., 2026; ITK, 2018a). Through increased organizational support, there can be increased capacity to track and monitor research applications, thus supporting the RLR process.

It is also recommended that researchers share annual progress reports and final research reports and outputs with RLR organizations directly. As this is not a legal

requirement in the license approval process, many RLR organizations continue to express the lack of access to research outputs. It is critical that researchers respond to these concerns, and contact RLR organizations, or community partners directly. This supports the tracking of research dissemination, and monitoring of research as a project evolves.

3.5.3 How can research licensing help minimize harm and improve Inuit self-determination?

Legislative amendments to Nunavut's *Scientists Act*, along with the development of new administrative regulations, would provide a stronger framework for advancing Inuit self-determination in research. Specific requirements could be established to set minimum standards for Inuit consultation and engagement, while the criteria and processes for approving or denying research license applications could be expanded and clarified. The scope of scientific activities subject to licensing, and the authority to define licensable research, should also be more clearly articulated.

One of the main concerns with the broader scientific community is sufficient research reporting (ARI, 2019), and under current legislation, the NRI can only encourage researchers to facilitate community-based reporting (NRI, 2025). Mandating community-based reporting in research would not only improve research conduct but also increase community access to research results. Additionally, other amendments can be made to increase the amount of time RLR organizations are given to review applications before auto-approving the application, for example, from 45 to 90 days. This provides RLR organizations with more time to conduct thorough RLR and potentially

provides feedback or identify terms to reduce harm identified in the research license applications.

Last, we recommend licensing agencies in Nunavut advocate for a territorial research ethics/advisory agency to help minimize harm in research. A standardized ethics review for each licensable project (under all legislation) would help to ensure that research aligns with Inuit research ethics and ensure that all projects are receiving a standardized review.

Through our study, we found that there is no one-size-fits-all solution to ensure that research licensing meets its goals. We recognize that research licensing does track and monitor research through the current NRI licensing process and Isirvik research portal. Research licensing does not effectively facilitate community engagement and consultation in research, as many ongoing challenges are related to limited community capacity or lack of researcher initiative. Last, it is unclear if research licensing is minimizing harm in research; however, we know that amendments to current research policy can help ensure this goal is reached. We recognize that it is important that RLR exists; however, there is room to improve the structure, protocols, and procedures for how RLR is conducted at the NRI so research licensing can continue to meet its goals. We are not saying there needs to be a complete change, but the feedback identified through our interviews provides important insights as we work towards addressing community concerns and making research work for Nunavummiut. We conclude this paper with a call for more research to be done on whether research licensing is meeting its goals, and what can be done about it. This could be achieved through opportunities to bring RLR

organizations together to discuss their experiences and to collaboratively identify solutions to the ongoing barriers.

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CHAPTER 4

LESSONS LEARNED FROM UNDERSTANDING COMMUNITY EXPERIENCES IN THE RESEARCH LICENSE REVIEW PROCESS IN NUNAVUT, CANADA

4.1 Introduction

4.1.1 Calls to improve research practices

Throughout Inuit Nunangat (Inuit homelands in the Canadian Arctic), there are increasing calls to improve the conduct and review of research (Beltrano et al., 2026; Council of Canadian Academies (CCA), 2023; Inuit Tapiriit Kanatami (ITK), 2018a; ITK & NRI, 2007). This is a result of unethical research practices and inadequate community involvement, which continue to leave a legacy in many Arctic communities today.

Some calls include the need for increased Inuit participation and governance of research-related decision-making (Carter, Tagalik, & Ljubicic, 2025; Inuit Circumpolar Council (ICC), 2022; Wong et al., 2020). Potential strategies include providing training to communities to increase local capacity and awareness of their roles in research decision-making; however, funding and resources are needed to help initiate these efforts (Beltrano et al., 2026). Additionally, researchers have been called on to share research results directly with communities (Beltrano et al., 2025 a,b; ITK, 2018a; Nunavut Tunngavik Incorporated (NRI), 2024; Wong et al., 2020).

4.1.2 Research licensing as a mechanism for Inuit self-determination in research

In Nunavut, Canada, research licensing aims to facilitate these calls, however, there are numerous challenges identified with capacity and accountability that limit its effectiveness (Beltrano et al., 2026; 2025; 2024). In Nunavut, Canada, any research involving air, land, water, and people with the intent of producing an academic or scientific output is subject to a Nunavut Research Institute (NRI) scientific research license (Beltrano et al., 2024; 2025; NRI; 2025; Polidoro et al., 2022; SC 1988, c.S-4). This licensing process accounts for approximately 60% of research throughout the territory and is legislated under the Nunavut Scientist (Gearheard & Shirley, 2007; NRI, 2021; 2025; Polidoro et al., 2024). Through the Scientist Act, the Science Advisor, appointed by the Minister responsible for the Nunavut Arctic College, is designated to approve research that does not pose risk of harm to the physical and social environment.

As part of the licensing process, the NRI facilitates consultation with research license review (RLR) organizations to gather feedback on proposed applications and support decision making of research approvals (Beltrano et al., 2026; 2024; Bull et al.,2019). This involves community research stakeholders across the Kitikmeot, Kivalliq, and Qikiqtani regions of Nunavut, such as Government of Nunavut (GN) departments, Inuit organizations (IO), Hunters and Trappers Organizations/ Associations (HTO/HTA), Hamlet offices, and community research organizations (CRO) (Beltrano et al., 2026). While RLR aims to support community engagement with research, there are challenges with organizational accountability and responsibility affect the implementation of research licensing, review, and governance practices across northern Canada.

Under current NRI protocol, if RLR organizations do not provide feedback after 45 days, the application is approved (NRI, 2021; Polidoro et al., 2024). Furthermore, while researchers are required to submit final reports to the Science Advisor, there is no legal requirement for oversight of the dissemination of research outputs to communities (SC 1988, c.S-4). Such challenges increase pressure on the limited capacity of RLR organizations, some of which do not have the adequate staff, or time to give, to review the increasing number of research license review requests each year, or keep track of research findings (Beltrano et al., 2026).

4.1.3 Understanding community experiences with research license review

In a unique partnership with the NRI, we have been learning from RLR experiences through an online survey (Beltrano et al., 2026), and Interviews (Beltrano et al., 2025) to understand community experiences with research license review in Nunavut. The survey included 20 responses from RLR organization representatives and provided a key baseline understanding of organizational processes for review. The survey revealed that RLR organizations receive up to 60 applications per year, and less than half (35%) receive compensation for review, and even less (10%) provide feedback on applications. Following the survey, 16 interviews were completed with survey participants and additional RLR organization representatives to gain more in-depth understanding of priorities, opportunities, and reporting related to research license review in Nunavut. The interviews revealed that RLR organizations would like to see increased involvement from researchers in community training, engagement, and funding to increase local capacity. Furthermore, increased access to reporting outputs is something

that RLR orgs would like to access to effectively understand the outcomes of proposed projects.

While the findings from both the survey and interview revealed recommendations to improve research licensing administration and review in Nunavut, there was still a need to further our knowledge. This led to an in-person workshop hosted in collaboration with NRI as the final research component of a SSHRC Insight Grant "making research work for Nunavummiut" (Beltrano et al., 2026; 2025). The grant is co-led by Dr. Gita Ljubicic (McMaster University) and Jamal Shirley (NRI) with collaborators Aqqiumavivk Society (Arviat), Qaujigiartiit Health Research Centre (Iqaluit), and Nunavut Tunngavik Incorporated (Nunavut-wide) nd supported by the Geomatics and Cartographic Research Centre at Carleton University (Ottawa).

Together at the workshop, RLR organizations collectively discussed recommendations and clarified key issues from the survey and interview results (Beltrano et al., 2026; Henri et al., 2019). The workshop aimed to answer the question "How can research consultation and engagement be improved in Nunavut to ensure better research outcomes for communities and enhance Inuit self-determination in research", through three objectives:

1. Identify criteria used by RLR organizations to review applications
2. Explore how RLR organizations would like to receive research results (from researchers)
3. Understand the types of support needed by both licensing agencies and researchers to support RLR organizations in their review processes.

This paper presents a contribution to geographic scholarships on Northern research governance by understanding how RLR processes and are shaped by community experiences across different organizations in Nunavut and discussing actions to improve these experiences. This work is the culmination of an important starting point to advancing Inuit governance and self-determination over research activities across the Canadian Arctic.

4.2 Methods

4.2.1 Where the workshop was held

The workshop took place in Ottawa, Ontario as a side meeting during the Arctic Change Conference in December 2024. The conference was selected as the workshop venue due to it being a major annual gathering for Arctic Researchers across a diverse range of disciplines (Annual Scientific Meeting, 2024). This ensured time and cost efficiency, as many workshop facilitators, project partners, and some workshop participants were already planning to attend the conference. Additionally, Ottawa offers strong logistical advantages, including frequent daily flights connecting various regions of Inuit Nunangat, making it a highly accessible and more cost-effective location for participants who were not planning on already attending the conference (Beltrano et al., 2026; Mallory et al., 2018).

4.2.2 Who was invited to the workshop

We aimed to represent a range of RLR organizations. Participants were purposively recruited based on the inclusion criteria of having completed the survey or interview.

Recruitment was then extended to additional RLR organization representatives who had not previously participated in the study. This was important to ensure a broad range of perspectives from different organizations who could contribute to our workshop discussions (Beltrano et al., 2026; Polidoro et al., 2022; 2024).

Author Beltrano distributed a recruitment email and project overview in English and Inuktitut (One of the official Inuit languages) to inquire about interest in participating in our workshop and followed up via phone or email 2 weeks later as needed (see Appendix 4.3).

There were 12 Nunavummiut who participated: 7 from the Qikiqtani region (from Iqaluit and Kinngait), 3 from the Kivalliq region (all from Arviat), and 2 from the Kitikmeot region (Cambridge Bay and Gjoa Haven) (Figure 4.1). Most (n=4) participants represented a CRO, followed by GN representatives (3) from the Departments of Health, Education, and the Environment, 2 representing each of HTO/HTA's and IOs, and one representing a Hamlet.

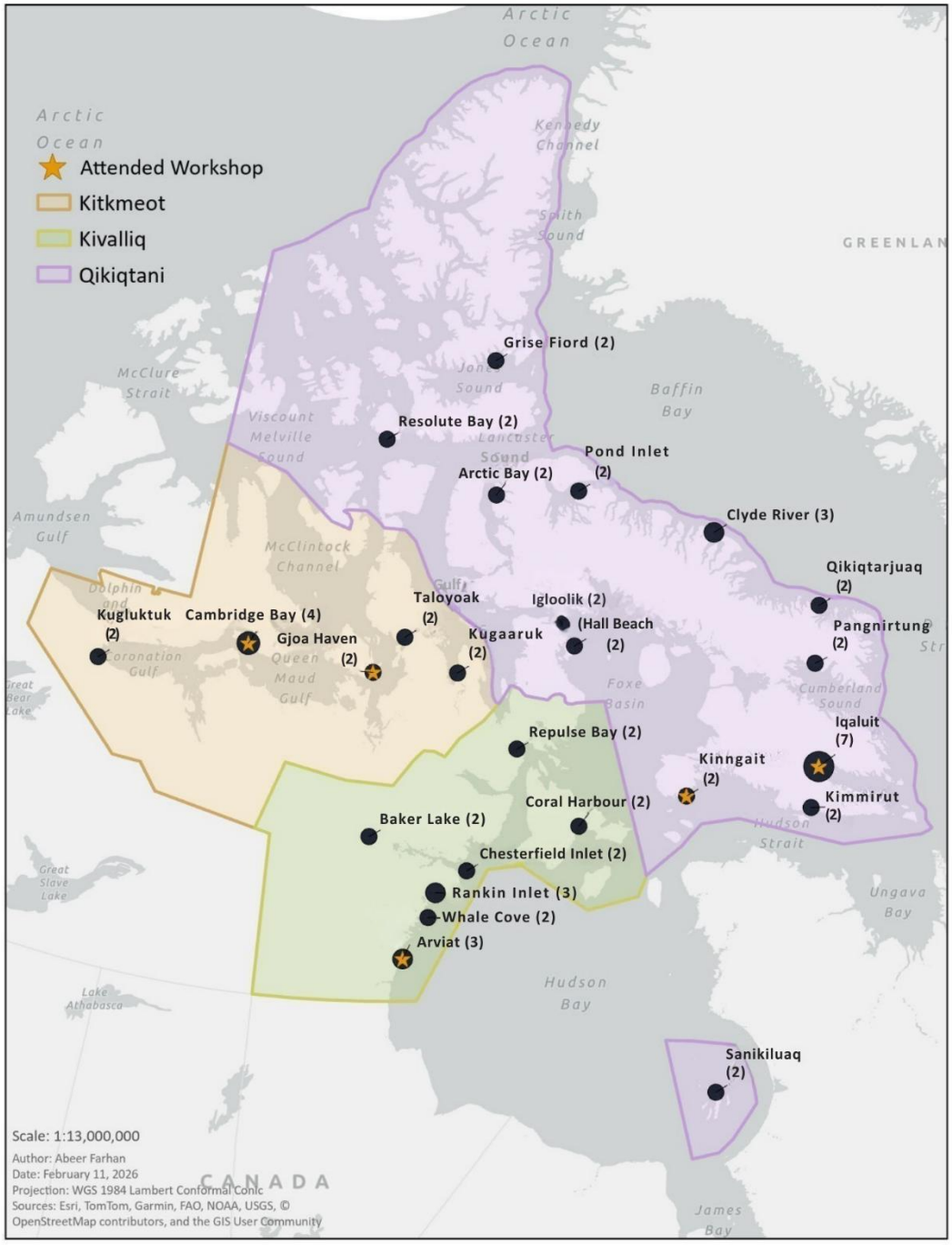


Figure 4.1: Spatial distribution of workshop participants, location, and project partners, where numbers represent number of organizations invited, and stars are communities represented

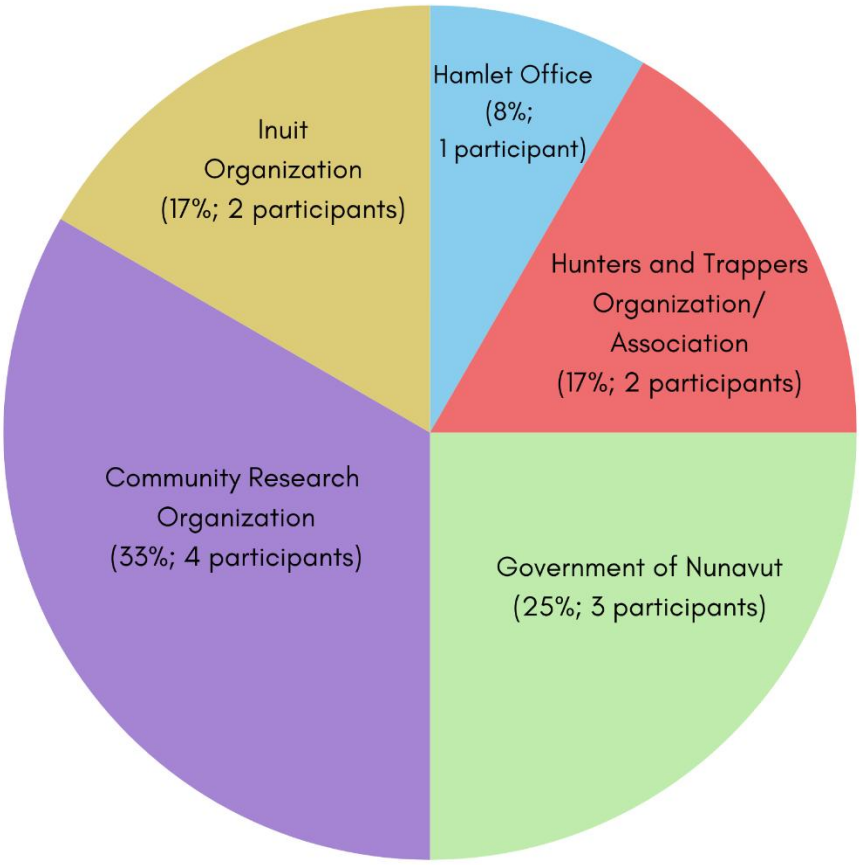


Figure 4.2: Workshop participant organization affiliation

4.2.3 Workshop format: World Café

World Café (WC) workshops involve a collaborative process that brings together both academics and non-academics to generate impactful research (McGrath et al., 2023; Monforte, Netherway, & Smith, 2023). It was a valuable approach to bring together our university-based research team, project partners, and research license review organizations to review and discuss preliminary results from the survey and interviews. The WC is also an effective mechanism for understanding lived experiences of individuals (Monforte, Netherway, & Smith, 2023) as it supports open dialogue in an informal setting

to enable individuals to exchange thoughts, ideas, and values on a given topic (McGrath et al., 2023). We adopted a traditional WC approach (Table 4.1) including opening remarks, facilitation, and a harvest (Schiele et al., 2022).

Table 4.1: Approach used for our world café (adopted from McGrath et al., 2023)

World Cafe Process	**How we incorporated into our workshop**
Informal setting (typically a cafe-style environment)	Hosted a side meeting at the Arctic Change Conference in Ottawa (December 2024). Rented a board room, provided coffee, tea, and snacks).
Welcome and introduction	Author Beltrano provided an overview of the WC, while author Shirley provided opening remarks
Small group rounds	4 roundtables – there were 3, 20-minute rounds of conversation between 3-6 participants
Questions	A co-developed question was discussed at each roundtable, each round of questions building on the previous group of responses
Harvest	At the end of the rounds, the facilitator from each group shares key points and emerging themes

The workshop was led by 2 hosts and supported by 4 facilitators and 1 note-taker. All facilitators and notetaker were affiliated with Dr. Gita Ljubicic's StraightUpNorth (SUN) research team (SraightUpNorth, 2025) and included 3 PhD students, one Master student, and one research associate (author Carter). Author Beltrano served as the primary host of the workshop, while co-author Shirley provided opening remarks, highlighting the importance of collaborative discussions in gaining insights into experiences with RLR. Each facilitator was responsible for ensuring focused dialogue and comprehensive coverage of the question assigned. This approach allowed participants to critically engage in each area of interest while promoting individual perspectives in the overall

discussion (Figure 4.3). Facilitators documented key notes during the sessions they moderated to track participant responses. For one of the groups, note-taking was assigned to an additional team member to provide support for a facilitator with less experience in this role, ensuring consistency and completeness in the quality of the notes. The notes were compiled after the workshop and shared with author Beltrano for analysis.



Figure 4.3: Workshop participants engaging in discussions
(Photo credit: Alexis Beltrano)

In following the Piliriqatigiinniq model for community health research (Polidoro et al., 2024; QHRC, 2026) (see Section 1.3.2), the workshop agenda was developed through an interative process with project partners and co-authors. In late Summer 2024, key priorities were identified from interviews (see Chapter 3) and discussions with NRI, informing the first initial draft of workshop questions. Throughout Fall 2024, workshop questions were refined with NRI licensing staff to ensure relevance and appropriateness of questions in accordance with the overall goals of the project (see Chapter 1.1.2). Ultimately, the questions that framed the focus of 4 roundtable discussions during the WC included:

1. Do you have specific criteria or priorities that you consider when reviewing license applications?
2. How would your community prefer to receive research results? OR how does your community want to hear back from researchers? And how can licensing/permitting agencies better support this?
3. What support do reviewers need (from licensing/permitting agencies) to more effectively review research applications?
4. What support do reviewers need (from researchers) to facilitate a meaningful review process? (Figure 4.4)

Participants had approximately 20 minutes to discuss the question at their table (McGrath et al., 2023), after which time they rotated tables to discuss the next question. The facilitator at each table stayed, and would share key themes from the previous group to generate and build on the discussion (Figure 4.4).

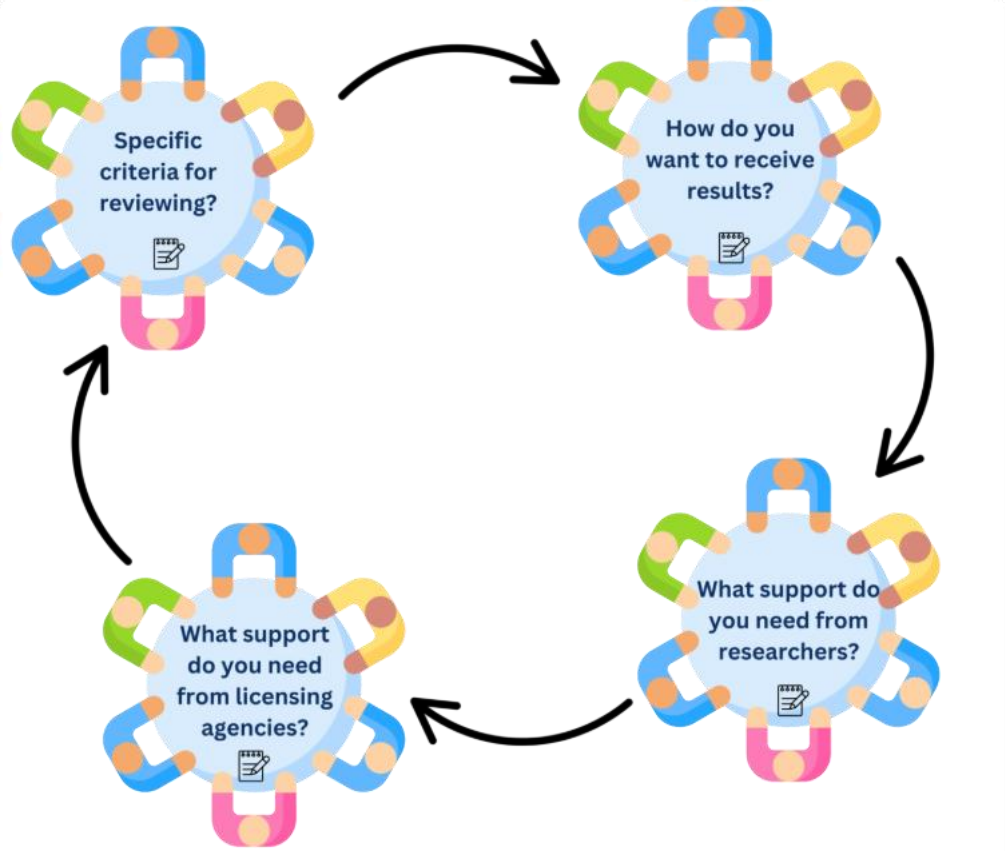


Figure 4.4: Diagram of the world café and questions asked. Where: the placement of the notepad represents the facilitator

4.2.4 Thematic analysis of workshop discussions

Performing thematic content analysis on workshop facilitator notes provided an opportunity to identify the commonalities and nuances across each question, and RLR organizations (Beltrano et al., 2026; Friese et al., 2018; Nowell et al., 2014). There was a manual and software supported thematic coding process for workshop results.

First, author Beltrano performed a manual thematic analysis to fully immerse in the data (Ahmed et al., 2025). The notes from each of the 4 facilitators were printed and

reviewed line by line. Each question was coded separately with a separate sub-category of emerging themes. Next, notes were imported into NVivo (Versions 14 & 15) for thematic content analysis. Through iterative reading and reflection of facilitator notes, 3 overarching themes that emerged through responses to each question were identified (Figure 4.5). The notes were reviewed in depth and relevant text was associated with a theme (See Appendix 4.6). Due to the interactive discussions within the WC, it was not possible to attribute quotes to direct individuals. For each roundtable discussion, RLR organization type was coded when direct links to their insights were present in the facilitator notes. This helped us identify emerging themes across different groups of organizations reviewing NRI applications.



Figure 4.5: Three overarching themes from each question asked in the world café

4.3 Results

4.3.1 Criteria and priorities when reviewing license applications

4.3.1.1 Relationships and partnerships with the community

One of the most common considerations when reviewing NRI applications that was discussed by workshop participants included whether the proposed project included a trusted relationship or confirmed partnership within the community. A CRO representative emphasized that building relationships with communities can change the direction of a project for the better, as building that time in the community will help negotiate relevant aspects of the project and identify priorities. Additionally, some communities require oral consent as part of their own approval processes, which requires researchers to travel to communities and build rapport. A CRO representative also stated they follow principles of the "Aajiiqatigiingniq Research Methodology" when reviewing research, where trusted relationships between the researchers and communities are important components. To follow this methodology, researchers are encouraged to work with communities as early as possible. Another CRO explained how early relationship building up-front will allow for community members to get the appropriate expertise to address the research question. Workshop participants noted that in health research, there are sometimes misrepresentations between what was agreed on between the reviewers and researchers, and partnerships could help streamline communication between these parties.

4.3.1.2 Community benefits and relevance

A second consideration addressed by workshop participants is community benefits and relevance in research license applications. Community research organizations want researchers to clearly communicate potential benefits to communities so they can see the value of the research. Participants noted that in person travel to communities would be an effective way to consult communities on a project idea, however, Northern travel is costly and can impact a project budget. Regardless of travel, CRO representatives emphasized the need for coming together to define terms, address the problem, and co-develop the research question to ensure a project's relevance and potential benefit to communities. One GN representative discussed how they review applications to make sure the research is relevant to their area of focus, such as climate change adaptation and mitigation, or school curriculum. Other criteria relevant to an Inuit organization representative included the benefits of the project to Inuit (i.e whether a project builds community capacity, supports a community, and looks at the need for the research, if any). Meaningful incorporation of Inuit Qaujimajatuqangit (IQ) was also identified as a key component of relevant and beneficial research. For example, one IO representative stated that researchers should follow an Inuit research methodology as part of incorporating IQ. Other CRO and GN representatives consider if researchers are providing resources to support the emotional and physical wellbeing of participants, as some questions proposed in applications can be triggering. In the application form itself, RLR organizations want increased oral and video components explaining the research and consent processes, and opportunities to communicate with the researcher directly, to ask questions, and

provide expertise. Incomplete applications result in RLR organizations not being able to fully understand a project and identify potential harm or risks. Direct community-researcher communication can mitigate such gaps.

4.3.1.3 Training opportunities

A third consideration identified by workshop participants was whether a project included training opportunities for community members. Both community research and IO representatives stated their focus on providing training for Inuit, and that researchers should incorporate this into their research. A Hamlet office representative built on this statement as there are many people within communities who can support research projects, and by training the community members you are having good community engagement. Additionally, researchers need to train individuals outside of the HTO or Hamlet office, and reach out to community members directly, for example, through radio shows. Another CRO representative reflected on the importance of training Elders, as they are highly regarded within Inuit culture and can support research projects through sharing their knowledge. Trained community members can in turn champion research projects, so they can help explain/interpret the project and work directly with the community.

4.3.2 Receiving research results

4.3.2.1 Actionable research results

Workshop participants also emphasized the need for actionable outcomes from research, and reporting outputs to incorporate such outcomes. A CRO representative noted that it is important to hear from researchers on their experiences, challenges, and key

takeaways from their findings. A GN representative expanded this and stated that researcher credibility would increase if outputs addressed how findings link to community values. Similarly, reporting outputs could be made more actionable by collaborating with community groups (such as Ikaarvik in Pond Inlet) or Regional IOs to help champion the actionable outcomes. Furthermore, digital tools, such as audio or video recordings, would be an impactful approach to communicating actionable outcomes of research. A CRO representative also mentioned that research itself is not a vehicle for improvement if it is not ongoing and does not provide value to the community. Actionable research provides community members an opportunity to direct the legacy of a project and streamline the benefits of local research. For instance, a CRO representative suggests researchers host workshops in communities to summarize and discuss their results to identify potential applications.

4.3.2.2 Community based reporting

Workshop participants want to see results in both English and Inuktut. This will help to unsure that unilingual Inuktut speakers are able to understand research findings. Some community members do not have access to the internet, or are unable to attend community presentations, therefore relying on the radio. One HTO representative stated that many community members do not have the time or capacity to read 20-page research reports and suggested that executive summaries should accompany all reports. Both GN and HTO representatives state that in-person results sharing is the most impactful source of receiving research results and should be factored into the research costs. If in-person visits are not possible, both a CRO and HTO representative stated that video reporting is

impactful, as Inuit are oral/visual people. Additionally, virtual presentations afford community members opportunities to ask questions. One CRO representative suggested using social media platforms to promote presentations and distribute findings. A GN representative highlighted the need for researchers to share links to access the reporting outputs, as this is not consistently facilitated across researchers.

4.3.2.3 Tracking and regulating reporting outputs

There was an emphasis on RLR organizations having access to a catalogue of research outputs as a tool to effectively monitor and evaluate continuity between research applications and reporting outputs. Currently, RLR organizations do not always know if what is being proposed is what is occurring or reported on. An HTO representative suggested the need for a database or portal that can host both applications and reporting outputs to address this gap. A GN representative recommended that the current Isirvik research portal be expanded with a feature to link reporting outputs. A CRO representative also noted that NRI can recommend communication options directly to researchers. Another suggestion identified by workshop participants was introducing a research portal that was specific to communities, where they could contact the researcher directly in the portal about reporting outputs. Workshop participants would like to see more direction from researchers regarding where to access outputs, for example, linking to websites. An IO representative also noted the idea of creating a youtube channel for Nunavut-based research.

4.3.3 Support needed from licensing and permitting agencies to facilitate a meaningful review

4.3.3.1 Funding

Workshop participants clearly emphasized the need for more funding from licensing and permitting agencies to help support capacity to complete RLR. IO and CRO representatives suggest that the allocated funding could support HR staff and increase organizational capacity, while a GN representative suggested funding to support organizations dealing with the research itself. Funding was also suggested to support workshops where RLR organization representatives could come together and discuss their experiences with RLR. One HTO representative would like to receive funding for technological advancements to their meeting space, such as smart boards or improved conference calling technology to facilitate meetings with research license applicants. The HTO representative stated that this would improve the review process by being able to directly ask questions through face-to-face conversations with the applicant.

4.3.3.2 Training opportunities

A second support identified by RLR organizations is for licensing agencies to increase training opportunities to support and enhance the RLR process. One IO representative identified an opportunity for licensing agencies to provide training on review criteria and how to conduct a review. Another HTO representative stated that licensing agencies should train RLR organizations on their rights when conducting RLR, such as when to say no to an application. One GN representative would like to receive

training from licensing and permitting agencies on IQ principles. Another IO representative flagged that RLR organizations are burdened by researcher ignorance and are often spending time answering questions related to how to budget, write a proposal, share results, and navigate the licensing process. One GN and IO representative suggested that if licensing agencies required some sort of training or certification on Nunavut-based research, it would reduce this burden on RLR organizations. Another GN representative stated that they have created their own video guidelines on how to conduct a review of health-related research. Moreover, it would be good to have NRI require researchers to attach a video to their application justifying their proposal.

4.3.3.3 Procedural improvements

Workshop participants also addressed support from licensing and permitting agencies related to procedural and organizational improvements to the RLR process itself. One IO representative stated that often there are too many projects taking place at once, and there would be benefits to staggering the administration of research licenses. There were representatives from a CRO, GN, and HTO who expanded this statement and said they would like more time to review applications. Another CRO representative stated that providing more time for review provides the opportunity to thoroughly review the application and clarify any elements that require translation or interpretation. They would also like licensing and permitting agencies to more clearly communicate expectations of researcher etiquette, as some researchers will continue to submit slightly modified applications after being told no to their application. Both a GN and IO representative would like to see research licensing and permitting agencies highlight their "priorities for the next

five years" so they can better understand the relevance of an application. Furthermore, a GN representative recommended an online application and review system to streamline RLR processes, while another suggested incorporating these interfaces into NRI's Isirvik research portal. An HTO representative expanded this statement and suggested that it would also be ideal to have an online system where wildlife samples related to a project could be tracked.

4.3.4 Support needed from researchers to facilitate a meaningful review process

4.3.4.1 Improved coordination in applications and reporting

Increased support from researchers in the application and reporting processes is needed, in addition to clarifying expectations for research. Workshop participants reflected on the ongoing academic tone and language in research license applications as a barrier to reviewing applications. One Hamlet office representative stated that researchers need to understand the communities they are coming to and need to avoid technical jargon in their applications. They also mentioned that applications coming from a "Western perspective" are not what the community wants to see. One CRO representative echoed this statement, as typed applications leave both a gap in the application process and "lots of questions" for reviewers. Engagement in the application and review process allows organizations to ask about the benefits and significance of the research, such as hunting impacts, which is not possible in typed applications. Workshop participants would like to see audio or video components submitted with applications to reduce the knowledge gap during review, as this was regarded as a more Inuit-approach to research. In addition to this, GN

representatives wanted researchers to provide links to relevant materials, so reviewers can better understand how the proposed research ties to the needs and relevance of community.

4.3.4.2 Communicate expectations

A CRO representative reiterated the importance of sharing results as a key priority and expectation when working with community members. Another area of support identified by workshop participants is for researchers to clearly communicate the number of hours or dollars needed from community members to support a project, and work this into their budget. One CRO representative reflected on experiences where researchers "have big plans" but expect community members to build the connections and source materials, translators, and venues for research activities. Researchers are encouraged to build their own relationships with the community and provide adequate compensation.

4.3.4.3 Increase opportunities for community engagement

The final support required from researchers to support RLR is the need for more engagement with community members as part of a project. A CRO representative stated researchers must be held accountable for the engagement proposed in their applications. Researchers propose scenarios where many people from the community will be involved in the research, but only a couple of people are ultimately engaged in the project. This leaves many community members unaware of the research taking place at the community level. Another CRO representative

supported this idea and wanted to see more video outputs from researchers and community partners, to ensure that the project has mutual benefits. Workshop participants want researchers to be flexible, and open to changes in the direction of the project as collaboration and priorities within the community evolve over time. Other workshop participants note the value in holding researcher open houses, as done at the Canadian High Arctic Research Station in Cambridge Bay.

4.4 Discussion

This workshop is the third phase of a mixed-methods investigation into community experience with RLR in Nunavut. Workshop findings complement survey and interview results by shifting from individual experiences to collaborative discussions and identifying opportunities to strengthen RLR processes. Representatives from RLR organizations discussed research priorities, and challenges/opportunities with research reporting, while also reflecting on the support received and needed from licensing organizations and researchers themselves. Through our reflection of workshop findings and crosscutting with relevant literature, we discuss RLR as a practice of research governance that structures relationships among land, institutions, researchers, community organizations, and Nunavummiut.

4.4.1 Reporting is a part of researcher accountability, and contributes to evidence-based decision-making

Ethical research practices begin well before research license approval and extend beyond the completion of a project and/or license (ICC, 2021; 2022; ITK, 2018; ITK &

NRI, 2007). This is echoed in our engagement with RLR organizations, as meaningful research governance is directly influenced by the relationships and information available to communities potentially impacted by the research (Ogden et al., 2016; Pedersen et al., 2020; Ramakrishnan, 2023; Tagalik et al., 2023). Therefore, when considering community experiences with RLR in Nunavut, researcher communication plays a critical role in shaping trust, legitimacy, and long-term research relationships with community members.

Inadequate access to research results emerged throughout our investigation as an ongoing gap in the research licensing process. Surveys revealed that most RLR organizations do not receive final reporting outputs (Beltrano et al., 2026; 2024), while interviews expanded on this problem, and called for improved coordination from researchers to communicate their findings (Beltrano et al., 2026; 2025 The workshop, however, focused on strategizing opportunities for improving the reporting gap in research (Beltrano et al., 2025). These reporting gaps are experienced by RLR organizations as barriers to evidence-based decision making about research (Jull et al., 2025; Wiebe et al., 2013) and licensing approval recommendations (NRI, 2025). Without knowledge of project findings, RLR organizations are unable to critically evaluate project impacts, emerging priorities, or inform future research outcomes (Henri et al., 2020). Ultimately, when results are not shared, researcher accountability is questioned, and meaningful research governance is questioned (MacLachlan et al., 2022; Ogden et al., 2016).

Research reporting can determine where knowledge travels, who can access results, and when. Online research portals are important governance tools to support the dissemination of knowledge and community access to research results throughout the

territory. The Government of Northwest Territories (GNWT) utilizes their Polar Research Portal to publicly share project summary reports (GNWT, 2025). Additionally, the Atanniuvik research management system in Nunavik will be designed to track research reporting in an online, systematic way that is accessible to both licensing agencies and RLR organizations (Beltrano et al 2026; Polynya Consulting Group, 2022a;b). This process does not exist in Nunavut, as NRI-researcher communications are currently managed by email. Furthermore, different reporting structures across Inuit Nunangat produce different relational outcomes. In the Gwich'in Settlement Area, local protocol requires researchers to meet with designated community officials to discuss proposed project intentions, activities, and travel dates for communicating project results (Gwich'in Tribal Council, 2011). At the territorial level, the GNWT requires researchers to submit plain-language summaries of research activities and any publications or research outputs (GNWT, n.d). These annual reports are required as part of the standard terms and conditions for research licensing and multi-year project approvals and are publicly available in their online research compendia (GNWT, 2024). A similar progress reporting structure is observed at the NRI, however, such reports are not always received by RLR organizations (Beltrano et al., 2026; 2024) nor are they publicly accessible. It is important to note that while NRI staff intend to share annual progress reports with RLR organizations, these reports may get overlooked due to staff turnover, or administrative overload (Beltrano et al., 2026; 2025; Ritsema et al., 2015; Wilson, 2019). Therefore, it is critical to ensure that RLR organizations receive annual reports not only from licensing agencies, but also from researchers directly to enhance the integrity of the RLR process. Overall, access to

research outputs is not a technical or administrative issue, but a relational governance challenge between academic researchers (who are mostly based in the southern parts of Canada, see Polidoro et al., 2024) and Nunavut-based RLR organizations, shaping how knowledge is communicated across Inuit Nunangat.

4.4.2 Investing in research license review capacity and relational processes enhances research governance according to Inuit values

Achieving meaningful RLR in Nunavut goes beyond refinements to current processes and procedures, rather, it requires strategic investment from institutions to help increase local capacity of the various organizations involved (ICC; 2022; Polidoro et al., 2024; Wong et al., 2020). Our investigation continuously underscores the administrative challenges and staffing limitations within organizations, which are already overstretched (Beltrano et al., 2026) and therefore unable to thoroughly review applications. Current support for RLR organizations, such as the reviewer recommendation form, is regarded as inadequate for facilitating a comprehensive review of incoming applications. Relying on limited staff and inadequate documentation can lead to a weakened RLR process, and less opportunities for relational accountability between researchers and community organizations (Ritsema et al., 2015; Wilson, 2019). Therefore, the administrative and fiscal challenges discussed throughout this investigation reflect a need to re-shape how governance is applied in RLR, reiterating investment as a critical starting point to strengthening Inuit leadership in research decision-making.

Review processes are sites of cultural translation and negotiation; therefore, it is important to situate RLR within relational and oral traditions of Inuit culture (Carroll et al., 2019; Henri et al., 2020; Ikummaq & Ljubicic, 2020). Dialogical approaches, such as video conferencing, was identified as a strategy to support such processes where RLR organizations can learn about the project from the researcher directly. Face-to-face communication is an effective mechanism for sharing information about a project with Inuit (Ikummaq & Ljubicic, 2020; NRI, 2025; Tondu et al., 2014). Researcher-reviewer meetings are currently being adopted in the Atanniuvik research licensing process, where regional and community research review committees can schedule meetings with the principal investigator to learn more about the project, methods, and other priorities or topics of interest from the committees (Polynya Consulting Group, 2022a;b). Text-heavy forms of communication, such as email or technical applications privilege colonial and southern research practices and are not effective communication tools with community-based organizations (Castleden et al., 2012; Topkok & Loon, 2021). Therefore, researcher-reviewer meetings are essential for meaningful research governance, as they create opportunities to use relational communication tools, clarify expectations, and reinforce organizational authority during RLR.

Furthermore, strengthening RLR processes requires strategic investment to support Inuit research governance. To elaborate, limited capacity and expertise to support RLR affects both RLR organizations and licensing agencies. Research licensing responsibilities at the NRI are limited to one staff member who is responsible for overseeing approximately 200 projects annually (Beltrano et al., 2026). Additionally,

workshop participants noted that more funding is needed from licensing agencies to provide training, increase local capacity, and to provide templates for providing feedback on applications. Such limitations echo a lack of resources available to achieve meaningful review processes. Strategic investments, such as targeted training sessions, enhanced review guidelines, and research liaison support can enhance Inuit governance by giving organizations the resources and flexibility needed to engage in RLR more effectively. This is already being done in parts of the Canadian Arctic, where in the Yukon, the Arctic Institute of Community Based Research released a guide to research review, including a checklist of guiding principles and sample questions for the reviewer, including focus on community confidentiality, community involvement, and ownership of research samples (Van Bibber & George, 2012). Additionally, in the Northwest Territories, the Aurora Research Institute (ARI) released a 4-page guidance document that provides key considerations for reviewing proposed research (ARI & Hotii ts'eeda Northwest Territories SPOR Support Unit, 2022). Securing funding to implement these strategies can enable RLR organizations to fully engage in their role in decision-makers of research licensing, while also providing additional support to NRI staff to effectively liaise with researchers and RLR organizations.

4.4.3 Research license review organizations defining research priorities and criteria, along with authority of enforcement, is implementing self-determination

Institutional review processes do not always align with Inuit ways of sharing, understanding, and evaluating knowledge (Bull et al., 2019; Held, 2020; Nickels & Knotsch, 2011). Our initial survey investigation revealed diverse approaches to

reviewing, including members involved, providing feedback, and whether criteria are used to review applications (Beltrano et al., 2026; 2024). Interviews further investigated individual experiences, and rationale for specified criteria, for example, aligning with organizational values, mandates, or personal interest (Beltrano et al., 2026; 2025). Both the interviews and survey suggest that a lack of criteria or priorities provided by NRI make it challenging to review all applications received. When there is a lack of clarity in the RLR process, it can lead to confusion, disengagement, or incomplete review. Therefore, it is essential for licensing agencies to communicate priorities for research license applications, in addition to enforcing such priorities are being addressed to achieve improved governance and self-determination of research licensing outcomes (Cadman, Snook, & Bailey, 2022; Bull & Hudson, 2019).

Without clear priorities, criteria, or expectations from licensing agencies, RLR organizations may experience perpetuated power imbalances (Bruhn, 2014; Cadman, Snook, & Bailey, 2022). This was confirmed in our workshop results, as participants are requesting more support from licensing agencies to communicate current research priorities and to clarify expectations for evaluating projects or requesting revisions. Currently, the NRI only has a guide for researchers, which informs the preparation of applications ahead of RLR (NRI, 2025). Creating a complementary guide for reviewers is a key starting point to increasing communication of expectations and processes for reviewing NRI applications (Perrin, Ljubicic, & Ogden, 2021). This document can address previous calls on NRI to clarify expectations and provide training on the review of applications, thus supporting efforts to implementing self-determination

in research (Beltrano et al., 2026). Furthermore, it remains important for licensing agencies to enforce community engagement, as this investigation reveals an ongoing theme of needing improved community consultation and involvement from researchers (Beltrano et al., 2026; 2025). Adhering to community research guidelines is a valuable entry point for researchers who are unfamiliar with Northern research protocols and ethics (Carter, Tagalik, & Ljubicic, 2025; Gwich'in Tribal Council, 2011; Healey & Tagak, 2014; Ogden et al., 2016). Existing guidelines from the NRI state that researchers are permitted to initiate consultations ahead of research license approval, and "are encouraged to independently engage with local and regional agencies and/or community members to present and discuss your research plans" (NRI, 2025:9). A challenge to this, however, lack of specified expectations for engagement, or monitoring from NRI to oversee the engagement (NRI, 2025). Licensing agencies can support researchers with meaningful engagement by linking existing guidelines for researchers with Inuit-specific calls to action for improved conduct of research. Additionally, updates to legislation to mandate community engagement as a condition of research license approvals can also be an effective mechanism for sustaining engagement (Beltrano et al., 2026; ITK, 2018). Nonetheless, it is the researcher's responsibility to adapt to place-based governance, for example, respecting Inuit research ethics, values, protocols, rather than expecting communities to adapt to academic research practices.

4.5 Conclusion

This article investigated community experiences with the research license review process in Nunavut. Drawing from our previous survey and interview analyses, we

developed an in-person workshop to engage representatives from RLR organizations across Nunavut through 4 key areas: priorities related to reviewing applications, receiving research results, support needed from researchers, and support needed from licensing agencies to help support the RLR process. It was essential to bring together RLR organization representatives from across the territory (Figure 4.1) to synthesize and exchange strategies for enhancing RLR experiences in Nunavut. Our findings challenge stakeholders in the RLR process (Beltrano et al., 2026) to rethink ethics, consultation, and accountability as ongoing relationships shaped by distance, jurisdiction, and culture rather than procedural requirements to satisfy licensing protocol.

Opportunities are recommended for researchers, licensing agencies, and RLR organizations to help advance Inuit governance and self-determination in research. This includes improved research reporting to support evidence-based decision-making, Investments in RLR capacity and relational processes, and enforcing research criteria and priorities (ITK, 2018).

It is essential that both RLR organizations and licensing agencies receive reporting outputs to maintain integrity of the RLR process. This can be supported by research regulators via mandating reporting to communities, specifically as a condition to support decision-making of future research license approval recommendations. This can strengthen relational accountability and encourages researchers to address the calls made by organizations to achieve Inuit self-determination in research (ITK, 2018; ITK & NRI, 2007; Wong et al., 2020).

Researchers can coordinate a meeting with the NRI and RLR organizations directly to discuss their application as a relational approach to supporting Inuit governance. This can result in a more streamlined RLR process where community stakeholders can hold researchers accountable for their project and its outcomes (Nickerson, 2017; Perrin, Ljubicic & Ogden, 2021; Ritsema et al., 2015). Additionally, training to support the RLR organizations would strengthen local understanding of review expectations, protocol, and best practices for reviewing. Increased capacity can provide a stronger foundation for RLR organizations to understand proposed research projects and build trust, therefore leading to more community support for present and future research (Government of Canada, 2017; Wong et al., 2020).

Review organizations can apply the findings from this study to establish their own review protocol, thus increasing Inuit self-determination in the RLR process (ITK, 2018a). This directly responds to the National Inuit Strategy on Research Implementation plan to create more Inuit-specific research ethics and regulatory review guidelines (ITK, 2018b). Additionally, licensing agencies can advocate for changes to the Nunavut Scientist's Act to better reflect the priorities, challenges, and support needed in regulatory research regimes. Research licensing agencies can consult communities directly in conjunction with reviewing the findings from our workshop to initiate the process of amending the Nunavut Scientist's Act.

In conclusion, transforming the RLR process in Nunavut will require a collaborative effort across all stakeholders. Understanding community experiences with the RLR process is an important starting point to advancing Inuit governance and control over

research activities in Nunavut. It is important to note, that pan-Arctic initiatives across Inuit Nunangat are important for achieving Inuit self-determination in the RLR processes. Therefore, we call on researchers, whether based in the South or North, conducting research throughout Inuit homelands to continue the conversation about RLR, Inuit research governance, and self-determination.

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CHAPTER 5

CONCLUSION

5.1 Reflecting on community experiences with research license review

My research aimed to identify community experiences with the RLR process in Nunavut through online surveys, semi-structured interviews, and a collaborative analysis workshop. As I reflect on my research question (Chapter 1.1.2), I realize that RLR in Nunavut is multi-faceted, complex, and viewed differently by each organization type. Each phase of research led to deeper and more nuanced understanding of challenges and opportunities with RLR in Nunavut. To improve research outcomes for Nunavummiut, I have identified 6 key messages that emerge based on insights shared by RLR organizations, including: 1) patience is key; 2) provide training; 3)invest in capacity; 4) enhance efficiency; 5) expand Isirvik, and; 6) refine reporting (Figure 5.1).

5.1.1 Patience is key: Take the time to build relationships and develop rapport

Building research relationships is already emphasized as essential in community-engaged research, as it aims to share control of research processes and outcomes, foster trust between researchers and community members, and support community ownership of research priorities, and knowledge generation (Grimwood et al., 2012; ITK & NRI, 2007; McGregor et al., 2010).While engaging organizations within communities, such as Regional Inuit Associations, or HTA's is central to all good research in the North, this dissertation reveals that researchers are still not doing a great job at documenting or describing that engagement, or providing confirmed support from communities as part of their NRI applications.

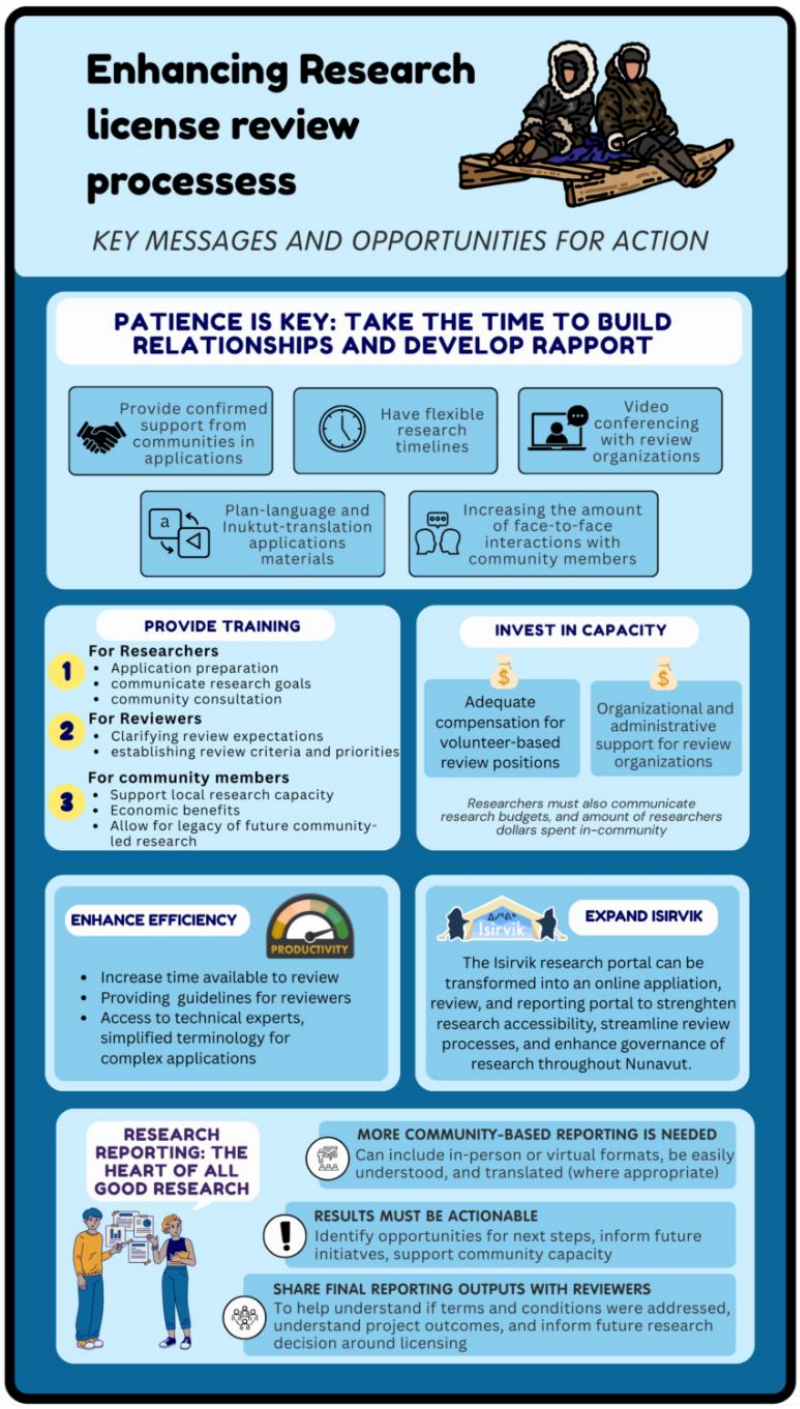


Figure 5.1: Key messages based on insights from community experiences with research license review in Nunavut

Across this research, the findings illustrate the importance of community engagement as a foundational mechanism for relevant, meaningful, ethical, and collaborative research (Gearheard & Shirley, 2007; ITK, 2018a). Community engagement in the research design and development phase preceding the RLR process is also important. This emerged as a key factor of how research is evaluated with respect to developing relationships and rapport with communities prior to submitting the research application. To build relationships with Inuit communities, researchers must practice accountability, patience, and presence, rather than focusing on fulfilling the checklist of licensing obligations through letters of support (or other required documentation) (Carter, Tagalik, & Ljubicic, 2025; Held, 2020).

RLR organizations revealed the burdens they can experience with applications that inadequately reflect engagement with northern communities. There was repeated emphasis on overly technical applications failing to communicate the purpose and methods of their proposed research, and the project's intentions to benefit or serve affected communities. This echoes the ongoing concerns of "box ticking" in research licensing, where RLR organizations are not trusting the sincerity of applicant's plans to engage and communicate with Inuit as described on the project proposal (See Chapter 3.3.1.4). Because of this, RLR organizations are reviewing applications with limited knowledge on the level of consultation and engagement that has occurred in the projects' development. The lack of certainty around RLR organization knowledge of the engagement is unclear, however, it reiterates the need for improved coordination between researchers and review organizations in the RLR process (see Chapter 4.3.4,1)., letters of support from

communities that are required as part of the NRI application package (See Appendix 1.2) risk turning to symbolic artifacts rather than evidence of meaningful engagement.

Another key finding is the need for researchers to invest their time in relationship building, preferably through face-to-face interactions. Review organizations describe in-person visits or video conferencing as critical tools to clarify research license applications, develop rapport, and create opportunities for knowledge exchange. When researchers incorporate community feedback and involvement, the research becomes more relevant and better aligns with community priorities (Pedersen et al., 2020; Sadowsky et al., 2022; Tagalik et al., 2023).

Researchers need to have flexibility, longer timelines, and a willingness to allow the project to evolve through community engagement and feedback. A community-engaged approach in research licensing is necessary for advancing the processes that currently govern how research proposals are developed and licensed in the territory. Furthermore, the community-engaged approach can also apply to other stakeholders in the research process to help achieve the goal of Inuit self-determination in research, including a coordinated effort amongst research governing bodies, funding agencies, and practitioners.

5.1.2 Provide training for research stakeholders

Through a range of input provided by RLR organizations, training was identified as essential to support community coordination and capacity building, as well as contributing to equitable research governance. Training is regarded as a prerequisite for

improving research quality, enabling community participation and involvement, and reducing barriers to reviewing research applications (See Chapter 2; Cadman, Snook, & Bailey, 2022; Jull et al., 2020). In this dissertation, training is identified for: 1) RLR organizations to support and enhance efficiency of their review processes; and, 2) for researchers to improve communications, approaches to community engagement, and fulfilling responsibilities through licensing.

RLR organizations recognize that many researchers pursue research projects without having sufficient understanding of community context to prepare thorough applications, engage in consultations, or communicate research goals in relevant ways. To help improve the quality and clarity of research license applications, RLR organizations suggested the development of researcher-specific training targeted to writing in plain language, incorporating translated materials, and addressing community feedback. Such training would help researchers create license applications that are more accessible to review, for example by linking to community priorities and incorporating visual, audio, and/or video elements to the proposal. This could increase RLR organization understanding and therefore support the decision-making related to research applications (Cadman, Snook, & Bailey, 2022; Jull et al., 2020). More broadly, to get started with training, researchers can refer to policies, protocol, and guidelines already established by Indigenous peoples in the United States (Indigenous peoples council on biocolonialism n.d), and New Zealand (Came, 2013). This can provide a foundation for context on the impacts of colonialism and Inuit governance of research as a result, including best practices for working with Indigenous peoples (See Chapter 1.2.3). While training could be established by licensing

agencies, communities themselves, or other regulatory agencies, it is important to utilize existing training programs within Nunavut that already have the established capacity to support and partner on research projects. To elaborate, researchers can connect with the Nunavut Network Environment for Indigenous Health Research (NEIHR), which has partnered with 4 organizations across the territory to help deliver training and programming to increase research capacity in Nunavut (QHRC, 2026). Through such training, there is potential to reduce RLR burden across organizations as there is less need to repeat feedback to researchers regarding basic expectations in northern research.

There is a need for specialized training for RLR organizations to support them in navigating the RLR process. During review, RLR organizations often represent the best interests of both their organization and the community. They are expected to articulate their feedback on complex proposals without formal training, guidance, or clarity of their authority within the licensing process itself. This leads to further challenges in research licensing, including uncertainties around evaluating the relevance of research, applying terms and conditions, and when a research license application can be recommended to be rejected (See Chapter 3). Emerging requests from RLR organizations involve NRI-led training in expectations and protocol for reviewing applications, however, current limitations with resources and capacity limit their current organizational ability to deliver this training. While funding is available for organizations to increase organizational capacity (See Chapter 2.5.1.1), training would need to be created from the ground-up, as formal training for RLR organizations is not currently established. Currently, reviewers can turn to Inuit Organizations such as NTI, who are involved in the review of all

disciplines of research (Figure 2.1) and may be able to provide additional guidance on the review of applications outside of their area of expertise.

In addition to organizational training, training for community members and community-based researchers was also identified as an effective way to improve community engagement. This training can be supported by researchers, as hiring community members to be part of projects is already ongoing, and research budgets often include allocation for training and compensation for new staff. Within communities there are diverse groups of Elders, youth, and knowledge holders, all having potential to contribute to projects in meaningful ways. By training interested community members to support research skill development (e.g. conducting surveys, interviews, participatory mapping, community-based monitoring, field sampling, etc.) local capacity is strengthened, and so is Inuit self-determination of research outcomes (Carter, Ljubicic, & Tagalik, 2025; Pedersen et al., 2020; Sadowsky et al., 2022; Tagalik et al., 2023). Overall, it is important for researchers to seek collaboration, consult, or engage with a diverse range of community members, knowledge holders, or research organizations based on their interest and relevant experience, such as:

- Ikaarvik (community research organzaition based in Pond Inlet, Qikiqtani Region)
- Aqqiumavvik Society (community research organization based in Arviat, Kivalliq Region)
- Kitikmeot Heritage Society (community research organization based in Cambridge Bay. Nunavut)

- Elders or knowledge holders within Inuit organizations (such as NTI or other Regional Inuit Associations)

Researchers must consider the reality that staff turnover is common (Pigford et al., 2018; Polidoro et al., 2024) resulting in a potential need to renew research relationships. This can present challenges for researchers, for example, when new staff is less receptive to a research relationship than their predecessor. Additionally focusing on working with one specific organization, an HTO for example, may limit the diversity of perspectives and skillsets that could be relevant to informing a project. Of course, in some cases very specialized knowledge is required. However, it is important to be transparent about the relative representation of community experiences in a project.

Considering the training needed for researchers, RLR organizations, and community members, this dissertation reiterates the importance of training as a tool for fostering mutual understanding and working according to shared goals and priorities. When research stakeholders and Inuit rightsholders work together, the research becomes more relevant, transparent, and meaningful to RLR organizations, community partners, and Nunavummiut broadly. It would also be valuable to document and evaluate such training efforts to inform understanding about its delivery and effectiveness.

5.1.3 Invest in capacity: More resources needed to support community-engaged research and license/permit review

There is a need for adequate – and ideally core – funding as a key facilitator for the quality, efficiency, and effectiveness of the RLR processes. A common barrier expressed

by RLR organizations is the limited access to funds to support the RLR process (ex: hiring additional staff to support review in busy seasons) which can strain organizational capacity and impact the quality of license reviews (or ability to review at all) (Itchuaqiyaq et al., 2023).

Through a survey and interviews, inconsistencies with compensation structures were identified across RLR organizations, where some reviewers receive compensation as part of their salary/ job, while others review in a volunteer capacity. Furthermore, some reviewers may receive honoraria tied to broader organizational activities like board meetings, rather than RLR itself. Survey responses also reveal that many RLR organizations operate with limited staff and no core funding, limiting the time available to thoroughly review incoming research license applications, follow up with NRI staff, or provide meaningful feedback. Such limitations contribute to administrative burden and reduce the ability for RLR organizations to track and monitor research outcomes based on the feedback that was provided. Applications reviewed under tight time constraints with competing interests of organizational priorities can cause added stress and/or impact the quality and completeness. If RLR organization representatives received compensation for each application reviewed, there would likely be more thorough engagement from organizations and ability to invest more time into the RLR process itself (ITK, 2018a; Perrin, Ljubicic, & Ogden, 2021). Ultimately, there is a clear need to secure long-term reliable funding to increase organizational capacity (ITK, 2018a). An immediate first step to addressing this need is for RLR organizations to respond to funding calls from Federal agencies and other Institutions to support community development (See Chapter 2.5.1.1).

Investing in capacity for a new salaried research liaison position at the NRI was also identified as a part of the solution. It is important to note the role of a research liaison cannot be fulfilled by the licensing Manager at NRI entirely. While they do liaise with researchers (ex: to provide updated plain language summaries and annual reports) for projects that are perceived to have a higher impact, they are already over-stretched with overseeing approximately 200 applications annually and are unable to thoroughly review and liaise with each project. Therefore, this role could contribute to reducing RLR organizational burden by having a dedicated experienced individual communicating with researchers directly to clarify technical jargon, and support coordination between NRI, RLR organizations, and researchers. Furthermore, the liaison can support NRI by managing deficiencies in the application processes (e.g. inconsistent documentation being provided to reviewers, insufficient follow up with license holders, unclear expectations for reviewers). This would alleviate the time spent by RLR organizations repeating basic information and requirements to researchers, thus increasing the time available to review applications. Therefore, having additional staff to support the liaising of applications (See Chapter 3.3.3.1) can be helpful for ensuring that application materials sent to RLR organizations are understood, and can be thoroughly engaged with.

Researchers must to communicate the distribution of research funds in their research license applications. Funding levels shape the level of engagement with communities, researchers are often left trying to balance limited funding to travel to communities for consultation, reporting, and translation components of a project (See Chapter 3; Polidoro et al., 2024). As northern travel costs increase, it is essential for

researchers to find ways to secure funds for these research activities and document the allocated funding in their research license applications. RLR organizations not only want to see how funds are allocated for consultation and engagement, but call on researchers to invest in community involvement and various roles throughout a project, for example, hiring community researchers and providing appropriate compensation for research participants (Carter, Tagalik, & Ljubicic, 2025; Castleden et al., 2012).

Meaningful community engagement in research and thorough review of applications simply cannot occur without adequate funding to support these initiatives. Allocating funding for community engagement/ involvement in projects (ex: including project planning, collaborative analysis, hiring community members, community presentations) must be regarded as essential for the success of NRI-licensed research. It is important to note, however, that although not all projects will be community-engaged (Polidoro et al., 2024; 2022) researchers still need to articulate how they will seek input on their proposals and disseminate findings back to the community. Furthermore, core funding, although important, is challenging to secure. Where core funding cannot be secured, the duties related to RLR must be clearly described as part of job descriptions to ensure allocated time for prioritizing and structuring engagement in research (such as RLR duties) in accordance with their organizational needs and priorities within the community.. Alternatively, organizations that participate in RLR but are not required to do this as part of their formal mandate, need to receive specific compensation for such activities.

5.1.4 Enhance efficiency: Increase the percentage of applications reviewed

Through the survey, interviews, and workshop discussions, we learned that the majority of RLR organizations do not review all applications they receive. Several barriers were described, which lead to incomplete or skipped review, including:

- **Technical language** – it takes a lot of time for community reviewers to try to decipher the meaning of specialized disciplinary or academic language, specifically in physical/ natural sciences or clinical research applications (See Chapter 3.3.2.4) which takes time away from reviewing the specific content and from getting to other license applications;
- **Time available to review –** the time it takes to review applications varies, and is limited depending on time of year, organizational priorities, competing interests (within the role itself, or at meetings). Furthermore, the automatic approval of research applications after 45 days puts increased pressure on organizations to complete a thorough review;
- **Intensity of specific research topics –** over-studied research topics can contribute to reviewer burden and lead to a lack of interest from RLR organizations, specifically if the topic is not relevant to the community;
- **Missing information –** when applications are missing key information like recruitment or community engagement approaches, reviewers are unable to provide critical feedback to inform the future direction of the proposed research;

- **Lack of standardized criteria –** review organizations would like to have more comprehensive guidelines from the NRI regarding RLR expectations, strategies for providing feedback, and requesting terms and conditions.

When there are barriers to research license review, less applications are reviewed. Nevertheless, after the 45 day review period, research is approved without the input of communities where (or nearest to where) the research is occurring. While overall the RLR process is working well for tracking and monitoring research (see Chapter 3), addressing barriers identified could contribute to more meaningful, thorough, and efficient review processes.

5.1.5 Expand Isirvik: The value in having a research license application, review, and reporting portal

RLR organizations articulated the value of the Isirvik research portal as an important tool developed by the NRI to systematically track and monitor research licensing activities in Nunavut (Isirvik, 2026; Chapters 3 and 4). Review organizations appreciate Isirvik's ability to increase public access to research licensing information and spatially represent research projects through the interactive mapping interface. Interviews and workshop discussions also identified opportunities to expand the functionality of Isirvik to better support RLR organizations in the application, review, and reporting stages of a research license. Currently, communications between RLR organizations and the NRI mostly take place over email, meaning that everyone must manage their own way of tracking files, monitoring version history, and meeting review deadlines. Findings from this project highlight an emerging need to streamline the RLR process by having Isirvik

act as an online interface to submit applications, facilitate review, and share reports. Isirvik has the potential to be more than a digital repository for research license application summaries, similar to other parts of Inuit Nunangat, such as the POLAR research portal in the Northwest Terrritories, and Nunavik's development of a research licensing, review, and reporting portal throughthe development of Atanniuvik (See Chapter 1.2; GNWT, 2025; Polynya Consulting Group, 2022a; b). Continuing to invest in Isirvik as a license application, review, and reporting portal is among the key recommendations coming from this research.

5.1.6 Refine reporting: Communication at the heart of good research

Research reporting should not only be treated as an administrative piece of research licensing, but as a key component to maintaining accountability, trust, and a meaningful relationship between researchers and community organizations or representatives. Across surveys, interviews, and the collaborative analysis workshop, insights from RLR organization reveal that research results are not always compiled and disseminated back to communities and RLR organizations broadly. This gap compromises the value of research reporting and the integrity of the research licensing process overall.

RLR organizations shared their ongoing challenges with limited access to research results. Results sharing still tends to be targeted to academic audiences (Polidoro et al, 2024; 2022), which can make it challenging for RLR organizations to assess license applications and learn from/apply results of the research. Use of technical language and jargon create barriers to understanding research outcomes and reinforces the narrative that

researchers are not always taking the time to articulate their findings in plain language for a community audience. This echoes the need for plain-language reporting that is accessible, translated into the appropriate Inuktut dialect (where possible) and targeted to community audiences (Polidoro et al., 2024; 2022; NRI, 2025).

It is valuable to report on findings in diverse formats, not relying on written reports alone. In-person and interactive reporting formats provide more opportunities for researchers and RLR organizations (along with community members) to engage, ask questions, exchange ideas, and reflect on their research experiences. Furthermore, RLR organizations are not only interested in hearing about research results, but also the challenges, procedures, and decisions that helped shape the project. A reflexive reporting format humanizes the research and reiterates researcher accountability, situating research reporting as an extension of community engagement rather than an obligation (Henri et al., 2020; ITK & NRI, 2007).

Moving forward, RLR organizations highlight their expectation that research results need to be relevant and actionable. This includes reporting that identifies opportunities to implement the next steps of a project, or potential to inform decision-making. Throughout the dissertation, we learn from RLR organizations that research should be continuous; where the conclusion of one project informs future initiatives, supports community capacity, and contributes to community and economic development. Identifying pathways for research results to be implemented in tangible actions, research reporting bridges the generation of new knowledge and findings with legacy and impact within the community (Pedersen et al., 2020).

Last, an organizational disconnect in current reporting expectations was revealed. Although the NRI receives annual progress updates and final project reports, RLR organizations are unsure if their application review comments or proposed terms and conditions were addressed. It is important to note that the NRI will typically use reviewer comments to inform terms and conditions on a research license, however, there is certainly a need to better track applicant compliance with the terms and conditions. This dissertation highlights the need for licensing agencies to better monitor if terms and conditions are being addressed in the annual progress updates (and to act accordingly if not). To ensure transparency and ongoing community engagement, it is also important for researchers to share annual progress updates and final reports directly with RLR organizations in addition to fulfilling NRI licensing obligations.

5.2 Recommendations for research licensing in Nunavut

To improve research outcomes, the processes surrounding research license review and data governance need to be updated. Chapter 3 discusses the 3 main goals of research licensing to: facilitate community engagement and consultation, track and monitor research, and minimize harm. Working towards achieving these goals are critical for improving research licensing and review in Nunavut, and this section will further explore this, through expanded functionality of the Isirvik research portal, and legislative reform of the Nunavut Scientist's Act to help research licensing achieve its main goals.

5.2.1 Technical advancements to the Isirvik research portal

Through Isirvik, the NRI provides the most public-facing information about licensed research compared to any other permitting or licensing agency in the territory (J. Shirley, personal communication, Jan 23/2026). Despite this, RLR organizations would still see improvements to Isirvik so that the portal can be used to streamline the application and review processes, as well as providing a repository for research reports to increase access to research results (Chapters 2 - 4). Developing an application portal is complex, iterative, and would require time, and associated costs, from software developers, NRI staff, and community members to ensure the portal is accessible and user-friendly. Nonetheless, creating an online application and reporting system within Isirvik would be an ideal approach to streamlining the RLR process (Table 5.1), as application forms, feedback, and communications with the NRI can be stored and shared in one location (Figures 5.2, 5.3). Opportunities for funding and technical expertise should be pursued in order to transform Isirvik into a digital platform that can strengthen research accessibility, governance, and researcher accountability throughout Nunavut.

Table 5.1: Recommendations for expanded functionality of the Isirvik research portal

Recommended new functionality for Isirvik	**Potential Impact**
Online **application** within the portal	• All application components are entered directly into the portal by researchers (this could also be developed similarly for annual renewal request) • Automated tracking of submission dates • Automated reminders to complete applications (if partially completed) • Individual accounts for researchers, to track new and previous projects (already submitted in the portal) • Standardized file naming and organization of application materials • Options to submit audio/video files for plain language summary • Reduced workload for NRI License Manager • Used for communications between researchers and NRI License Manager regarding completeness, additional screening/permits required, and date sent for community review
Online **review** within the portal	• Reviewers access all documentation through the portal • Review comments entered directly into the portal by RLR organizations • Standardized approach to reviewing applications • Improved management of research application materials • Options to submit feedback using audio/video files • Used for communications between researchers, RLR organizations, and NRI License Manager regarding revisions required, review status, approval, and issuing licenses
Online **reporting** within the portal	• Annual and final reports uploaded directly into the portal by researchers • NRI License Manager and RLR organizations have immediate access to reports, for review and comment (and to process license renewal) • Options to submit audio/video files for annual/final report • Options to directly upload and/ or link to research reports, articles, other outputs • Improved tracking and monitoring of research dissemination • Increased RLR organization, along with decision-maker and public, access to research results

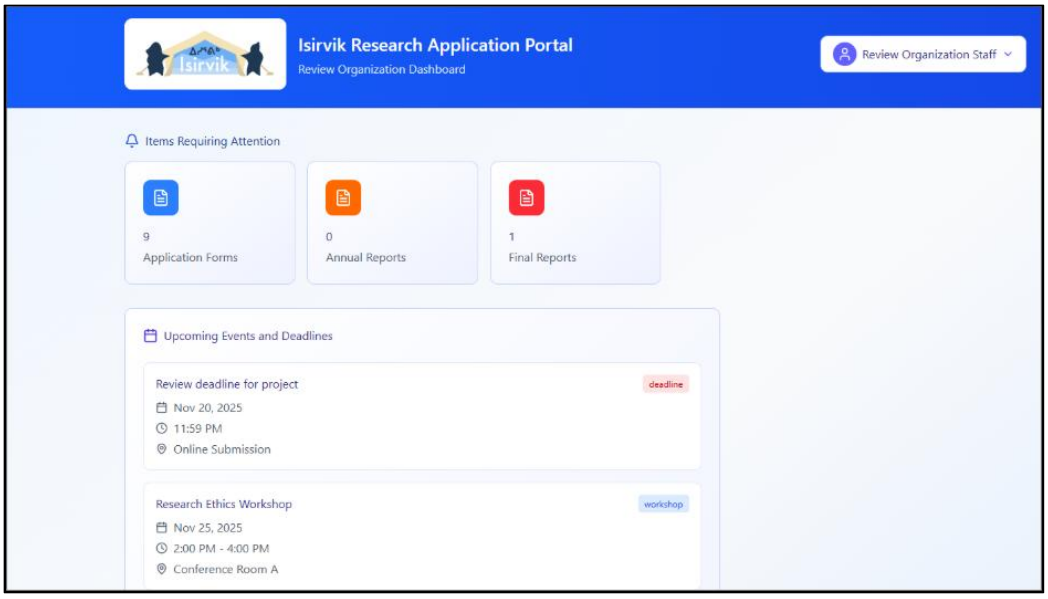


Figure 5.2: Mockup of an Isirvik review portal for incoming applications and reports. Where: This is a draft view of what RLR organizations would see, including a dashboard to view number of applications and reports requiring attention and community calendar of events (for example, upcoming workshops or review deadlines).

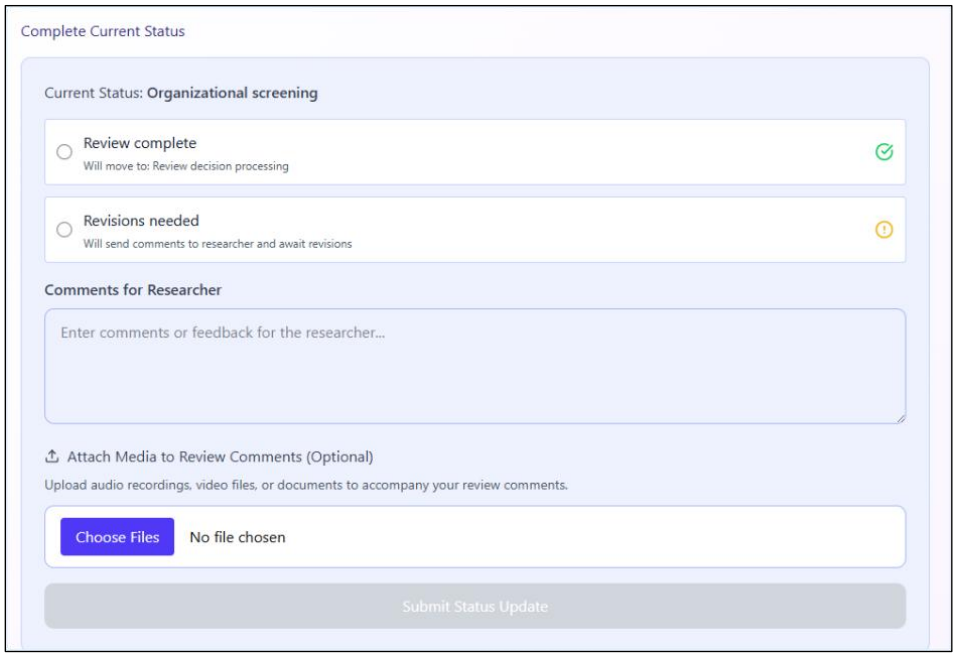


Figure 5.3: Mockup of how review organizations can select a status update, write feedback, or upload media to accompany review decision recommendation

The challenge to developing a research application, review, and reporting portal is the requirement of long-term funding to support the significant amount of software development time, along with ongoing computing infrastructure and maintenance. Additionally, the NRI would need to develop policies regarding data management would to ensure Inuit governance of research-related data. More research is needed to understand organizational approaches to Inuit data governance and how a research application and review portal would address any requirements to protect identities, ensure private information, and respect community-researcher data sharing agreements. It would also be ideal to have opportuniites to engage researchers and RLR organizations in development consultation with NRI staff, and software developers to ensure all priorities and expectations are met. These are not necessarily obstacles, but important resources and capacity would need to be in place to expand Isirvik functionality as recommended. Investing in technology to increase community access to research information directly responds to NISR's priority areas (ITK, 2018b), and developing an application and review portal would only further enhance Isirvik's value in facilitating research transparency and accountability.

5.2.2 Legislative reform of the Nunavut Scientist's Act

Nunavut's RLR future greatly depends on how much the actual research licensing process itself can adapt. While Chapter 5.1 details remaining gaps with community engagement, reporting, barriers to reviewing applications, training, and research management, RLR organization experiences reveal underlying procedural and structural challenges to research licensing that require deeper consideration of research governance

legislation in Nunavut. The Nunavut Scientist's Act was initially enacted in 1988 as part of the Revised Statutes of the Northwest Territories (Nunavut Act, SC 1988). Once Nunavut was established as a territory in 1999, the Act was consolidated as one of the laws of Nunavut and has undergone one amendment in 2011 (RSNWT (Nu) 1988, c S-4). With tremendous improvements in research capacity in Nunavut, and requirements for more partnered research approaches, there are several sections of the Act that would be beneficial to update.

Currently, the power to renew, extend, suspend, or revoke a licenses is concentrated with the Minister responsible for the Nunavut Arctic College, and the Nunavut Science Advisor designated to administer licensing on the Minister's behalf (NRI, 2025), while RLR organization feedback is considered in an advisory capacity (see Chapter 3). However, the community RLR organizations are doing the bulk of the review, and they want to ensure their criteria are met. Currently, the Act does not discuss research review processes, protocol, or require consultation to ensure that Inuit needs, concerns, and preferences are considered when a research license is issued. Including an explicit need for consultation with Inuit in the licensing process is recommended for revised legislation (Table 5.2). The NRI and/or Minister may have to step in for final decisions in certain circumstances, but ultimately if community review is requested there needs to be legislative authority for their decisions (and not just an advisory role). Without this, Inuit concerns regarding having their criteria met, or the challenges of incomplete review, will remain prevalent (Chapter 3). The motivation to review may be less if Inuit do not feel they have any real say in whether a license is approved or not. Having more formal recognition of Inuit roles and

authority in RLR processes may also contribute to improved researcher accountability as they know they are responsible for addressing feedback. I recognize that it will require a significant amount of effort, community consultation, and official procedures to amend the legislation, however, it is important to communicate the current challenges and barriers experienced by Inuit as a mechanism for informing recommendations to amend the Act.

Table 5.2: Potential ideas for amending the Nunavut Scientist's Act to strengthen review organization authority in the research licensing process

Section of the Act ***(***RSNWT (Nu) 1988, c S-4)	***What the Act states***	***Potential amendments***
Section 3: Time of issuing licenses	*"The Minister shall issue a licence within one year after the receipt of the application for a licence unless: (a) in the opinion of the Minister, the research proposed to be carried out could be injurious to or unduly interfere with the natural or social environment of Nunavut; and (b) the Minister provides written reasons for the opinion."*	Require consultation with Inuit and provide Inuit the power to deny research if they deem such harm; allow Inuit to specify proposed changes to the project, where the research may not be able to take place in that community until the community approves of the proposed changes
Section 3: Powers respecting licenses	*"The Minister may at any time, for any reason that the Minister considers appropriate, extend, renew, alter or revoke a licence issued under this section."*	Licensing decisions should also be informed by, review organizations potentially affected by the research
Section 4: Statement of information	*"Where any material change takes place after the [research proposal was submitted], the applicant shall, without delay, provide corrected information to the Minister or the science advisor"*	Such changes to the project must be clearly communicated to Inuit, as changes may affect/ alter recommendations for approval
Section 5: Reports and other information	*"Every person to whom a licence is issued under this Act shall, within six months after the date on which the licence expires, provide in duplicate to the Minister or the science advisor, (a) a report setting out the scientific work done and the information obtained; and (b) such other information as the Minister may determine"*	Incorporate additional reporting requirements, such as; 1) the report must be received within six months in order to renew the license, and 2) reports must also be shared with Inuit

5.3 Ongoing commitments and next steps: Developing a guide for reviewers

Key priorities for enhancing the RLR process in Nunavut were related to providing more training opportunities for RLR organizations to support their review role, and practical considerations for review efficiency (Chapters 3, 4). Both the interviews and collaborative analysis workshop reveal there is not always a consistent approach to

reviewing applications, and this is attributed to the limited funding or capacity within some northern organizations (Kuokkanen, 2020; Ogden et al., 2016; Ritsema et al., 2015; White, 2009). As part of our efforts to mobilize key findings from this research and provide additional support for RLR organizations to make informed decisions and increase efficiency in the review process, we are developing a guide for reviewers to clarify roles and protocols.

Research in Nunavut is complex, multi-disciplinary (sometimes multi-jurisdictional), and poses different levels of risk to communities (Prno et al., 2021). Therefore, the guide for reviewers focuses on strategies and recommended review protocols for evaluating projects based on the level of risk identified by the review organization. Currently, as part of my ongoing RA work with the NRI, I am drafting a guide for reviewers to consider 3 levels of risk (i.e. low, medium, and high), and proposing an associated review protocol for each type of project (Table 5.3). Reviewers will be expected to triage applications using the guidelines provided (Table 5.3) to help inform their review processes. Low risk projects would not require a detailed review, as there would be little to no perceived risk to the social, or physical/natural environment. Therefore, RLR organizations do not have to spend extra time reviewing applications, including providing comments, or requesting terms and conditions.

Medium risk projects may require additional clarification or information to support reviewers in providing feedback or making decisions, including:

- feasibility of the project;
- potential for work to be disruptive to the community;
- specific benefits to the community;
- issues around compensation; and,
- privacy/confidentiality considerations.

High risk projects are typically more complex, technical, or sensitive in nature (especially in relation to health projects or field work that is destructive to the environment), and generate substantive questions or concerns from the community. As these projects pose the most risk to the physical and social environments in the communities where the research is taking place, considerations may include:

- asking the researcher to resubmit with plain language if the application is too technical;
- creating a team of advisors with specialized expertise to help support the review; and,
- requesting a virtual meeting with the research team to ask questions and make recommendations.

Table 5.3: Examples of the levels of risk for NRI projects, and recommended review protocol

Risk Level	*Example of project*	*Time to review*	*Recommended review protocol*
Low	• Led by Nunavut residents or a Nunavut-based organization • Community-based monitoring studies outside of community • Partnered research with confirmed/documented community support	<1 hour	• Can proceed without requiring a detailed review (reviewing the application briefly to identify any ethical concerns)
Medium	• No confirmed community support • Community involvement with fieldwork	1-3 hours, or one meeting with the review organization/ committee	• May highlight specific actions or requests according to a list of considerations set by the review organization • More information may be wanted/ needed to help inform the approval recommendation process
High	• Health/clinical research involving community members • Sensitive/ triggering research topics • Destructive environmental sampling	More than 3 hours, or multiple days, or meetings with external experts, community consultation	• Review all parts of application in thorough detail • May need to solicit expertise from technical experts • May need to have community feedback/ involvement in review decision

While the guide will be completed within the next calendar year, more time will be needed (beyond my involvement in this project) to deliver training to the review organizations and to ensure the guidelines are understood. Although training for building Inuit research capacity is a key target in the NISR (ITK, 2018b), there are currently no plans to deliver training on how to enact the guide for reviewers in-community. I do recognize, however, that training will help ensure RLR organizations feel confident in applying the guidelines for reviewers, as well as testing the recommended review protocol according to level of risk (if supported by the NRI). Future research can also follow up

with RLR organizations to identify effectiveness of the guide and opportunities for further refinement.

5.4 Concluding remarks

I have framed this dissertation to contribute to the broader research goals of our "Making Research Work for Nunavummiut" project. My specific contributions relate to deepening our understanding of community experiences of RLR to help achieve better research outcomes for those involved in research processes. While the importance of Inuit governance of research is widely discussed across national (Anderson & Bonesteel, 2010; ITK, 2018a;b; Nickerson, 2017; Truth and Reconciliation Commission, 2015), territorial (Kuokkanen, 2020; Ogden et al., 2016; Ritsema et al., 2015), regional (Bull & Hudson, 2019; Cadman, Snook, & Bailey, 2022; Pfiefer, 2018), and community levels (Cadman, Snook, & Bailey, 2022; Sadowsky et al., 2022; Scobie & Rogers, 2019), much of this work relates to southern and northern-based researcher roles and responsibilities, as well as northern organizations involved in research governance. We are not aware of prior investigations into the perspectives and experiences of community research license review organizations, who are at the intersection of research governance and research practice. I have dedicated my doctoral research to deepening our collective understanding of RLR experiences with NRI-licensed research and interpreting their insights in ways that will contribute to addressing gaps and limitations in RLR processes. This research aimed to address NRI-identified priorities, and has managed to do so in a number of ways by:

- Identifying factors contributing to review fatigue and burden in Nunavut;

- Discovering new ways to track and enhance research license application and reporting materials for the benefit of Nunavummiut;
- Developing new communication tools, such as the Isirvik research portal, to improve public access to NRI-licensed research;
- Providing recommendations for research stakeholders to improve research outcomes; and,
- Creating training resources to enhance RLR organization capacity in Nunavut.

This research has been made possible by the close partnership with NRI, and important guidance and support of NTI, Qaujigiartiit, and the many representatives of community review organizations who contributed their time and insights. It is my hope that at least some elements of what we have learned through understanding community experiences with RLR in Nunavut, can ultimately help to inform Nunavut-specific implementation of NISR actions for Inuit self-determination in research (ITK, 2018b; Table 5.4).

Table 5.4: NISR priority areas and objectives for each priority (from ITK, 2018a)

National Inuit Strategy on Research priority area	***Action***	***Contributions to this action***
Advance Inuit Governance in research	1.2: Support Inuit representational organizations in articulating Inuit Nunangat research priorities	• Informed development of a guide for RLR organizations to support RLR • Identified RLR organization priorities across surveys, interviews, and collaborative analysis workshop to help inform Inuit research governance through research licensing
Enhance the ethical conduct of research	2.6: Create community-level research review processes connected to regional, national, and international processes and/or agreements	• Engaged with RLR organizations across Nunavut to better understand review processes • Established recommendations for a RLR training program for NRI applications • Some of the key messages related to community engagement and license review processes could also inform future development of a Nunavut-specific research ethics review process
Ensure Inuit access, ownership, and control over data and information	4.4: Create and invest in digital Inuit Nunangat data repositories that are inclusive of Inuit knowledge in ways that are respectful of its distinctive forms as well as the Inuit norms that govern its use and sharing	• Contributed to the development of an online and mobile functionality of the Isirivk research portal • Improved public access to licensed research occurring in and about Nunavut

As I neared the end of my doctoral research, during my last visit to Iqaluit in January 2026, I had a conversation with Jamal that profoundly resonated for me, in terms of the importance of my research for NRI. We were sitting in the boardroom at NRI, discussing opportunities for research licensing in Nunavut. He explained to me how even though the future of research licensing in Nunavut remains uncertain, my research is essential to understand what is working, and the remaining opportunities for improvement. Jamal continued with this reflection, and stated how through my doctoral research, compiling knowledge from community members can inform a proposal for

amendment to the Nunavut Legislative Assembly to re-structure Inuit governance of research licensing. We ended the conversation by agreeing there is much work to be done, but this research is a necessary starting point to catalyze changes in the current research licensing regime. I have been honoured to be mentored by Jamal. To know that he finds this work valuable not only for the NRI, but also that it could be used as evidence in both practical and policy changes in Nunavut, is something distinctive for me. When I started this research, my initial vision was to provide recommendations to help make research licensing more beneficial for RLR organizations and share my findings back with project partners. Learning that others believe there is much greater value in my research, to provide a foundation for real, meaningful change, is more important to me than any publication out of this project. I am proud to conclude this dissertation knowing there are many opportunities to address community experiences with RLR, across various platforms and audiences.

As a community-engaged researcher, the main goal in undertaking doctoral research was to make some kind of positive change within the organizations I have worked with, and people I have connected with in the process. As a settler-researcher in Canada who has worked alongside many Inuit, and Nunavummiut in particular, I am incredibly privileged to have had opportunities to learn from extraordinary research partners and knowledge holders, and I am committed to passing on lessons I have learned to my future research collaborators. There is more work that needs to be done, but it is important to remember where these conversations started, where they have gone, and where they will take us, as we collectively work towards Inuit self-determination in research.

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6.0 APPENDICES

Appendix 1.1: Key research partners involved in my thesis

Alexis Beltrano PhD Candidate McMaster University	PhD student at McMaster University collaborating on the Making Research Work for Nunavummiut project. My involvement in this project began as an undergraduate RA where I cross-checked Isirvik for accuracy and consistency, inserted any missing records, and uploaded project summaries and their translations (as requested by the NRI). I also completed my MA thesis as part of this work via a topical coding analysis of social science research topics, and how they have changed over time. Describing my involvement in this research proposal supports the vision of my northern project partners who have guided my thesis research to further explore community experiences with the research license review process in Nunavut.
Gita Ljubicic Project Co-Lead McMaster University	Supervisor for my PhD thesis and is an Associate professor at McMaster University. Gita is a Tier 2 Canada Research Chair in Community-Engaged research for Northern Sustainability, supporting this community engagement plan. Gita has over 20 years experience of working with Inuit communities. As a project co-lead, she co-guides the project design and methodology, and has worked closely with Jamal and other research partners ensuring locally identified priorities as the forefront of importance. Gita hired me as a research assistant to begin working on the NRI database in August 2019.
Natalie Carter Collaborator McMaster University	Natalie is the Community Engagement Lead for Ljubicic's research team in the School of Earth, Environment and Society at McMaster University. Natalie is working closely as a collaborator on this project and mentor to Polidoro through planning and preparation meetings involving questionnaire design and implementation. Natalie has worked with many communities across Nunavut, including as part of the Arctic Corridors Northern Voices shipping project (University of Ottawa), the Kangut project on Inuit knowledge of light geese (Environment & Climate Change Canada), and her work with Ljubicic facilitating a survey to understand Inuit uses a needs for weather, water, ice and climate information and services (McMaster University). Carter will help Polidoro with results verification and reporting back to communities, and knowledge mobilization upon completion of the survey analysis through proposed examples such as policy brief and plain language reports.
Jamal Shirley Project Co-Lead Nunavut Research Institute	Director, Innovation and Research at the NRI. He has over 25 years' experience in the research process across all disciplines in Nunavut. Shirley has worked closely with researchers and communities over the years in designing and developing research projects and programs. As the Co-Lead of this project, Shirley is also responsible for helping

	guide the methodology of my PhD thesis and suggesting any changes when needed.
Jade Owen Project Co-Lead Nunavut Research Institute (2022-2024)	Jade is the Manager, Research Design and Policy Development at the Nunavut Research Institute (NRI) in Iqaluit. She has extensive experience with wildlife research and policy through previous positions in the Government of Nunavut, and she will also provide guidance on a broad range of interdisciplinary scientific research, training, communication, and outreach initiatives in Nunavut. Owen will be the key liaison and research lead for the NRI in this project. Her involvement is critical because she: 1) is immersed in and familiar with the research landscape in Nunavut; 2) has established community relationships and is aware of Inuit cultural protocols; and 3) is based in Iqaluit and will be mentored by Shirley. Owen will help with initial contact and recruitment for survey participants (research license review committees), and she will also work with Ljubicic to advise Polidoro on various aspects of research design, facilitation, and analysis. Owen's role in this project supports NRI goals of expanding their research capacity to independently lead projects, and to develop research training for the NAC as it moves towards becoming a university.
Jean Allen Collaborator Nunavut Tunngavik I ncorporated.	Senior Research Advisor at Nunavut Tunngavik Incorporated (NTI), the regional Inuit organization responsible for implementing the Nunavut Agreement (land claim). NTI is very interested in how research is conducted in Nunavut, since research is considered a relevant tool for action regarding social and cultural wellbeing. Allen will act in an advisory capacity in all aspects of the proposed project, to help ensure that our research efforts align with NTI goals for a Nunavut-specific research strategy. She will also provide methodological and analytical guidance, facilitate important connections with regional Inuit organizations (Kitikmeot Inuit Association, Kivalliq Inuit Association, and Qikiqtani Inuit Association, and play a key role in mobilizing results to diverse audiences.
Gwen Healey Akearok Project co-lead Qaujigiartiit Health Research Centre	Executive and Scientific Director of the Qaujigiartiit Health Research Centre. Healey Akearok was born and raised in Iqaluit, and she co-founded this independent, non-profit community research institute with the late Andrew Tagak Sr. in 2006. Qaujigiartiit's vision is to use research as a tool for action to address health inequities in Nunavut communities, while promoting IQ and western science ways of knowing and understanding health and wellness. Under Healey Akearok's direction, Qaujigiartiit has brought over $30 million in research and training funding to Nunavut since it was established, and more than 1000 Nunavummiut have participated in or led training workshops, pilot projects, research projects, and student initiatives. Healey Akearok will share project leadership with Ljubicic and Shirley, and will also contribute health science and IQ research experience in terms of research design and analysis.

Shirley Tagalik Collaborator Aqqiumavvik Society	Chair of the Board of the Aqqiumavvik Society. Tagalik has lived and worked in Arviat for over 46 years and has developed and led numerous local projects related to community wellness, food security, and sustainability of country foods. Tagalik has worked with Inuit Elders, community organizations and Government of Nunavut departments across Nunavut, as well as having an extensive network of research partnerships with academics related to interdisciplinary health and environmental research. Tagalik will act in an advisory capacity in all aspects of research, particularly in contributing her time, and guidance on social science and IQ research, as well as community engagement considerations across all disciplines.
Peter Pulsifer Collaborator Carleton University	Associate Professor in the Department of Geography and Environmental Studies and the Associate Director of the Geomatics and Cartographic Research Centre (GCRC) at Carleton University in Ottawa. Pulsifer is a specialist in geomatics with 14 years of experience working with and addressing priority issues of Inuit and other Indigenous Peoples of the Arctic (i.e. Gwich'in, Yup'ik, Saami) in a co-production model for the establishment of community-based expertise, capacity, and information infrastructure. Pulsifer will act in an advisory capacity in all aspects of research, and will continue to involve the GCRC technical manager Amos Hayes, particularly in relation to data management and database development that responds to feedback from surveys, interviews, and case studies. Pulsifer and his team will play a critical role in developing a prototype of the Nunavut Research Portal.
Amos Hayes Collaborator Carleton University	Technical advisor of the Geomatics and Cartographic Research Centre at Carleton University. Hayes is responsible for the creation of the Nunaliit platform supporting the development of Isirvik. Amos was one of the first people I collaborated with on this project as he shared knowledge with myself about database structure, functionality, and how to approach the database both a user and behind-the-scenes. Amos provided me with tutorials regarding different functions in the database, such as uploading documents and project summaries. Moving forward, I will be contacting Peter Pulsifer for any database-related inquiries

Appendix 1.2: Nunavut Research Institute Scientific Research License Application (Online form, for all disciplines)

1.1 PRIMARY APPLICANT'S INFORMATION

*The Primary Applicant is the license holder responsible for the research project and accountable for the conduct of all research team members

Primary Applicant's Name *

Affiliation

Department

Mailing Address (PO Box or Street Address) *

Town/City

Province

Country

E-mail address *

Postal Code

Project website/webpage

1.2 RESEARCH LEADERSHIP

The NRI is collecting the following information to better track Inuit and/or Nunavummiut leadership in licensed research.

Check all that apply to the primary applicant(s):

☐ Nunavut Inuit

☐ Nunavut Resident

Is the proposed research led by or partnered with a Nunavut-based organization?

○ **Yes** ○ **No**

If yes, please specify:

1.3 TEAM MEMBERS TO BE INCLUDED ON THE RESEARCH LICENSE

Full name	Affiliation	Role	Nunavut Inuit	Nunavut Resident	
			○ Yes ○ No	○ Yes ○ No	Add new item after item 1 / Remove item 1

Add 1 more

2.1 RESEARCH PROJECT TITLE

Project Title *

Keywords *

For keywords you can refer to the topics list by visiting Isirvik Research Portal

Note: Please use commas to separate keywords.

2.2 RESEARCH DISCIPLINE

Please select all that apply: *

- ☐ **Physical/Natural Sciences**
- ☐ **Health Sciences**
- ☐ **Social Sciences**

If you are applying for a license to conduct health or social sciences research, please provide additional information described in Annex A.

If you are applying for a license to conduct physical/natural sciences research, please provide additional information described in Annex B

2.3 RESEARCH PROJECT TIMELINE

Date range for research activities in the current calendar year:

Start Date mm/dd/yyyy **End Date** mm/dd/yyyy

* Please notify the NRI immediately if you change or cancel your research dates in the current year.

Is this application for a multi-year research project?

○ Yes ○ No

If Yes, please provide the date range of the multi-year project.

Initial Start Date Month Day Year **Expected End Date** Month Day Year

NOTE: Multi-year research licenses may be renewed for two additional and consecutive years without a new application UNLESS there are substantial changes to your project (e.g. new field locations, new research methods, additional team members).

Contact the NRI for instructions or information on multi-year license renewals. A new application is required every three years.

2.4 RESEARCH LOCATIONS IN NUNAVUT

Community	Latitude	Decimal Degrees °	Longitude	Decimal Degress °	
	○ N ○ S	°	○ E ○ W	°	Add new item after item 1 / Remove item 1

Add 1 more

2.5 SOURCES OF RESEARCH FUNDING

Please identify the source(s) of funding for the project (check all that apply)

- ☐ Canadian Tri-Agencies (NSERC, SSHRC, CIHR)
- ☐ Indigenous Organization
- ☐ Foundation/Charity
- ☐ Private Sector/Industry
- ☐ Federal Government/Corporation
- ☐ Territorial Government
- ☐ Provincial Government
- ☐ Canadian Academic Institution
- ☐ Non-Canadian Academic Institution
- ☐ Non-Canadian Government
- ☐ Other (please specify):

Please specify funding program, faculty and/or department (if applicable):

Estimated project budget:

3.1 PLAIN LANGUAGE PROJECT DESCRIPTION

Please attach a non-technical project description, no more than 750 words, in plain English and Inuktitut (or Inuinnaqtun, if research will occur in Kugluktuk and/or Cambridge Bay). The non-technical project description should provide the following details:

- Project Title;
- Primary Applicant's Name and Affiliation;
- Summary of project background, research questions and objectives;
- Justification for the study;
- Where, when, and how long the field research will be take place;
- Methods used to conduct the research; and
- How, when, and with whom research results will be shared in Nunavut.

ATTACH FILES

Upload File

You can upload up to 3 files.

Choose Files No file chosen

▶ More information

3.2 DETAILED TECHNICAL PROJECT DESCRIPTION

Please attach a technical description of the proposed research including the following information:

a) Objectives: short-term and long-term objectives for the project

b) Background and Rationale: the state of knowledge and research related to the problem or question(s) being investigated. Explain the history and development of the research questions and justify the significance of and need for the project.

c) Progress to Date: Describe the results of any work completed to date on the project. Include information on progress in the areas of capacity building, communications, and integration of Inuit knowledge.

d) Recruitment: How will each type of participant be recruited, who will recruit each type of participant, and what materials will be used for or during recruitment.

e) Methodology: Describe and justify the research design, research methodology, data analysis techniques, and the ethical research protocols to be followed (e.g. protocols to secure informed consent, community engagement). Explain where and when the work will be carried out and justify the selection of research locations.

f) Data management: Describe your data management plan, and explain the principles and protocols for collecting, sharing, storing, and using data and information collected from or about Inuit and/or Nunavut.

g) Research outputs: Describe the major research outputs to be generated through the project (academic theses, publications, presentations, reports, etc.); describe specifically how and when research results will be validated with and communicated to research participants and impacted organizations in Nunavut.

ATTACH FILES

Upload File

You can upload up to 3 files.

Choose Files No file chosen

► More information

4.1 COMMUNITY CONSULTATION, INVOLVEMENT AND LOCAL BENEFITS

Have you consulted or involved Nunavut residents and/or organizations in developing the research project prior to submitting your application?

○ **Yes** ○ **No**

If Yes, please describe engagement, consultation and/or collaboration activities and results. If no, please explain why not. Include any information/advice received from or about the community or communities.

Describe how Nunavut residents and/or organizations will be involved and compensated (e.g. pay rate for level of involvement) throughout the research process.

* Attach any letters or correspondence from Nunavut organizations expressing support for the project.

ATTACH FILES

Upload File

You can upload up to 3 files.

Choose Files No file chosen

► More information

Describe how the project will directly benefit Nunavut residents and/or organizations (e.g. training, employment, contract services, equipment donations, community research priority, community data request, etc.) If applicable, describe how the project will benefit wildlife and the environment, including long-term datasets.

4.2 POTENTIAL HARM AND/OR DISRUPTION RESULTING FROM THE RESEARCH

Please describe any potential harm and/or disruption that the project might cause to Nunavut residents and/or to wildlife and the environment.

What steps will be taken to minimize and avoid any harm and/or disruption resulting from the research activities?

5.1 CONSENT

The NRI publishes the primary applicant's information (s. 1.1); names and affiliations of team members; research project title; research project discipline(s); research location(s); funder(s); and the plain language project description in the NRI research compendium and the Isirvik Research Portal, both of which are publicly accessible.

Do you consent to the NRI publishing this information?

○ **Yes** ○ **No** ○ **Yes, with conditions (please specify below)**

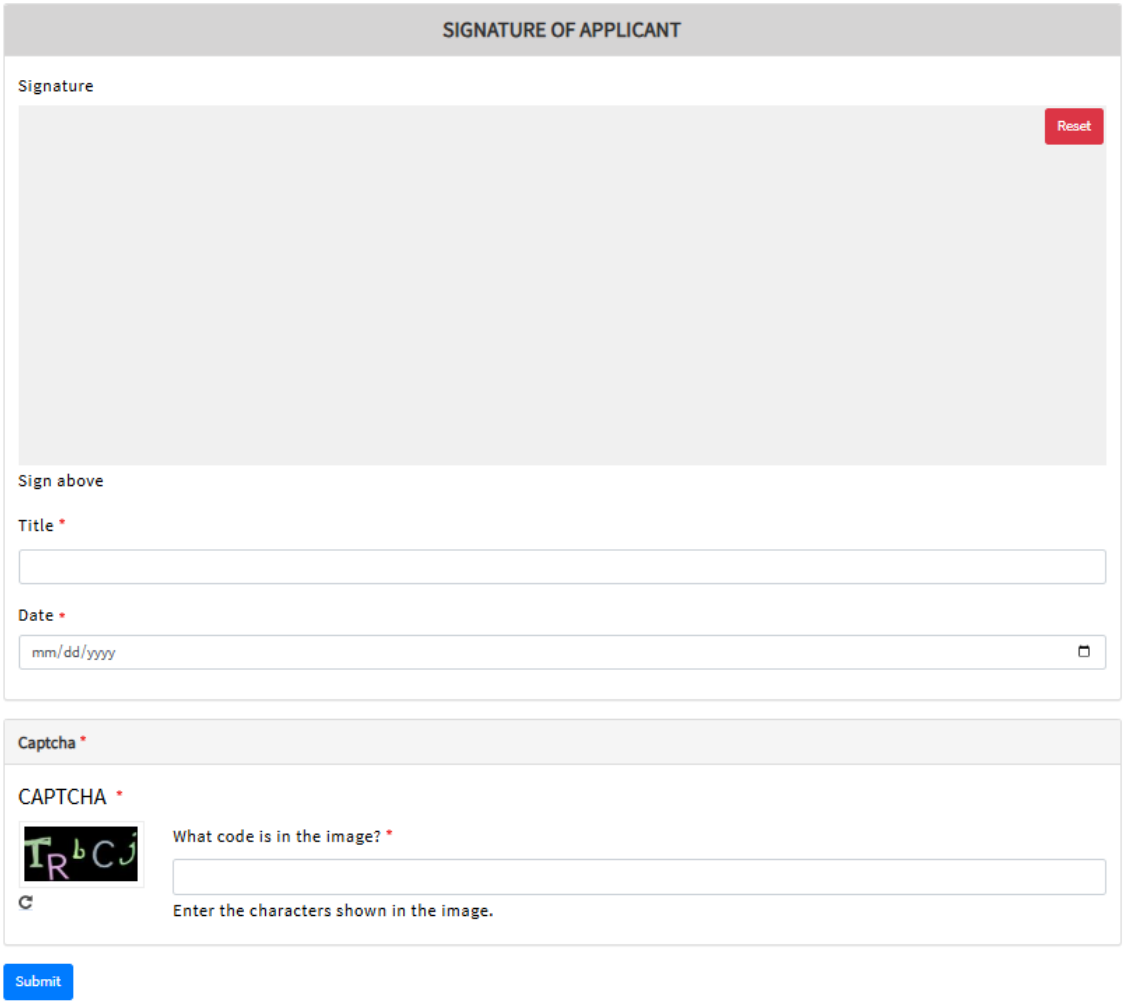
Do you consent to the NRI using information provided in your application for statistical or analytical purposes, including trends analyses and other NRI-led research? Sensitive personal data will be aggregated and anonymized.

Information used may include parts or all of this application.

○ **Yes** ○ **No** ○ **Yes, with conditions (please specify below)**

Do you and your team members hold valid medical travel insurance for the duration of your time in Nunavut?

○ **Yes** ○ **No** ○ **Not applicable (Nunavut residents only)**


SIGNATURE OF APPLICANT
Signature
Reset
Sign above
Title *
Date *
mm/dd/yyyy
Captcha *
CAPTCHA *
What code is in the image? *
Enter the characters shown in the image.
Submit

Appendix 1.3: Additional permits or licenses required for research in Nunavut

Authorization	Required for, or separate from NRI license?	Issuer	Description
Wildlife research permit	Separate	Dept. of Environment – GN	Studies of terrestrial wildlife
License to collect fish for scientific purposes	Separate	Department of Fisheries and oceans Canada	Studies of marine/ freshwater mammals, fish, invertebrates, fish habitat
Species at Risk Act research license	Separate	GN	Any species listed in the Species at risk act
Archaeology & Paleontology research permit	Separate	Department of Culture - GN	Archaeological sites
National parks research permit	Separate	Parks Canada – Nunavut field unit	Research activities in a national park
Migratory birds	Separate	Canadian wildlife service	Research involving any migratory birds issued under section 4 and 19 of the Migratory Bird Regulations
Migratory birds' sanctuary	Separate	Canadian wildlife service	Research activities in a Migratory Bird Sanctuary in Nunavut, issued by the Canadian Wildlife Service under section 9 of the Migratory Bird Sanctuary Regulations
Nunavut wildlife area permit	Separate	Canadian wildlife service	Research activities in a National Wildlife Area in Nunavut, issued by the Canadian Wildlife Service under section 4 of the Wildlife Areas Regulation
Special approval to conduct research in schools	Required	Department of education – GN	Research that will involve students or school staff
NIRB screening decision letter	Required	Nunavut Impact Review Board	Physical science projects taking place on Nunavummiut land

Appendix 2.1: Survey materials – PDF copy of online survey (English)

MAKING RESEARCH WORK FOR NUNAVUMMIUT:
UNDERSTANDING COMMUNITY GROUP EXPERIENCES WITH RESEARCH LICENSE REVIEW

Welcome! **We invite you to complete this survey if you are a member or a representative of a research license review committee in Nunavut. Please confirm the following before you start:**

- I have received and read the *Letter of Information* [https://straightupnorth.ca/making-research-work-for-nunavummiut/] about this project co-led by researchers at the Nunavut Research Institute and McMaster University.

  ☐ Yes
  ☐ No

- ***If NO]*** If you have not read the ***Letter of Information***, we encourage you to review the letter to learn more about this project before starting the survey [https://straightupnorth.ca/making-research-work-for-nunavummiut/]. If you prefer, you can contact Alexis Polidoro (PhD Student at McMaster University) at (905) 741 2963 or polidora@mcmaster.ca for an overview of the project, or if you have any questions about this survey.

  ☐ I have now had the chance to review the ***Letter of Information***, and I am ready to continue with the survey.
  ☐ I do not want to continue with the survey.
  ☐ I have had the opportunity to ask questions about my involvement in this study and to receive additional details I requested.

  ☐ Yes
  ☐ No

- ***[If NO]*** If you have not had the opportunity to ask questions about your involvement in this study or did not receive additional requested details, please contact Alexis Polidoro (PhD Student at McMaster University) at (905) 741 2963, or polidora@mcmaster.ca.

  ☐ I have now had my questions answered, and I am ready to continue with the survey.
  ☐ I do not want to continue with the survey.
  ☐ I agree to continue with the survey, according to the terms explained in the ***Letter of Information***.

  ☐ Yes
  ☐ No

- ***[If Yes to all, continue to survey questions.]***
- ***[If either No or I do not want to continue with the survey are selected for ANY of the options above, skip to the message below.]***
- Thank you for considering this survey. If you have questions or concerns about the project, please contact Alexis Polidoro (PhD Student at McMaster University) at (905) 741 2963 or polidora@mcmaster.ca. If you change your mind, you can always come back to this survey through the link provided.

GROUP DETAILS

1. What is the name of your group (organization or committee)?

_____

2. Who is completing this questionnaire? ***(dropdown menu)***

☐ One person on behalf of the group

2a. If one person on behalf of the group, has the committee met to discuss the answers? ***(dropdown)***

☐ **Yes – answers reflect responses from the whole group**
☐ No – in my role I can answer for the group
☐ One member of the group – other group members may also respond individually
☐ Other, please explain:

_____

RESEARCH LICENSE REVIEW

3. How many research license applications does your group receive from the Nunavut Research Institute each year? ***(select one from list)***

☐ 1 – 10
☐ 11 – 20
☐ 21 – 40
☐ 41 – 60
☐ More than 60
☐ I do not know
☐ I prefer not to answer

4. Does your group review ***ALL*** of the research applications that you receive from the Nunavut Research Institute?

☐ Yes
☐ No

4a. ***[If Yes, skip to Question 5]***

4b. If **No**, how many license applications does your group review out of the total you receive? ***(select one from list)***

☐ None
☐ Some (1 – 39%)
☐ About half (40 – 60%)
☐ Most (61 – 99%)
☐ I do not know
☐ I prefer not to answer

***If* any percentage** *is selected, please answer the following open-ended questions, and then continue to Question 5]*

4c. Please explain how your group decides which license applications are reviewed or not.

_____

☐ I prefer not to answer

4d. What affects this decision? (e.g., time of year, time available for the group to meet, length of application, research topic, translation, group member availability, etc.)

_____

☐ I prefer not to answer

[If None is selected, please answer the following open-ended question, and then skip to Question 13]

4e. What affects your decision not to review license applications? (e.g. time of year, time available for the group to meet, length of application, research topic, translation, group member availability, etc.)

_____

☐ I prefer not to answer

5. When your group reviews research license applications, it is:
(select all that apply)

☐ At a specific meeting organized to review and discuss applications
☐ Part of a regularly scheduled meeting to discuss various matters
☐ By email
☐ I prefer not to answer
☐ Other, please explain:

_____

6. How often does your group meet (in person, virtually, or by phone) to review research license applications?
(select one from list)

☐ Weekly
☐ Biweekly (every two weeks)
☐ Monthly
☐ As needed
☐ We don't meet to review applications
☐ I do not know
☐ I prefer not to answer
☐ Other, please explain:

_____

6a. If you don't meet to review applications, do members review individually, or do you not review at all? Please explain:

_____

7. How long does it typically take for your group to review ***one research license application*** (including reading the application, meeting to discuss, and preparing comments)?
(select one from list)

☐ 1 – 29 minutes
☐ 30 – 59 minutes
☐ 1 – 2 hours
☐ More than two hours
☐ I do not know
☐ I prefer not to answer
☐ It depends on the application, please explain:

8. Who reviews research license applications?
(Select one from list)

- ☐ All members of the group
- ☐ One person representing the group
- ☐ I prefer not to answer
- ☐ It is different each time. Please explain:

_____

8a. If one, what is their job title/role in the group?

_____

9. Does your group use a set of criteria or guidelines that help you evaluate research license applications?

- ☐ Yes
- ☐ No
- ☐ I do not know

9a. If **Yes**, please explain the main criteria and list any specific documents you use as guidelines

_____

_____

9b. If **No** or **I do not know** *[skip to Question* **11***]*

10. Does your group consult and/or coordinate with other organizations in your community when you review research applications?

- ☐ Yes
- ☐ No
- ☐ I do not know

10a. If **Yes**, please list the organizations in your community that your group consults and/or coordinates with when you review research applications

_____

_____

10b. If **No** or **I do not know** *[skip to Question 12]*

11. Do members of your group receive compensation for their time in research license review?
(Select one from list)

- ☐ Yes, all of them do (as part of their job, committee role etc.)
- ☐ Yes, some of them do
- ☐ No, no one receives compensation
- ☐ I do not know
- ☐ I prefer not to answer

12. For the members of your group who are compensated for their time in research license review, how are they compensated?
(Select all that apply)

- ☐ It is part of their job
- ☐ It is part of a committee role that includes compensation
- ☐ I do not know
- ☐ I prefer not to answer
- ☐ Other, please explain:

_____

COMMUNICATIONS WITH THE NUNAVUT RESEARCH INSTITUTE

13. When the Nunavut Research Institute sends a research license application to review, they typically provide a deadline of 30–45 days for a group to complete and return the *Reviewer Recommendation Form*. The timing is:
(Select one from list)

- ☐ Always enough time to review
- ☐ Usually enough time to review
- ☐ Sometimes enough time to review
- ☐ Never enough time to review
- ☐ I prefer not to answer
- ☐ Other, please explain:

_____

14. How often does your group ***provide feedback*** on a license application to the Nunavut Research Institute?
(Select one from list)

- ☐ Always (for every application)
- ☐ Usually
- ☐ Sometimes
- ☐ By completing the *Reviewer Recommendation Form*
- ☐ Written comments in an email
- ☐ Written comments by fax
- ☐ Over the phone
- ☐ In person
- ☐ I do not know
- ☐ I prefer not to answer
- ☐ Other, please explain:

_____

14a. *[Only if **Always/Usually/Sometimes** is selected, please answer the following question, otherwise skip to Question **17**]*
How do you provide your feedback to the Nunavut Research Institute?

_____

*[Only if anything other than **Reviewer Recommendation Form** is selected, please answer the following question, otherwise skip to Question **17**]*

14b. The NRI provides the *Reviewer Recommendation Form* to help reviewers summarize comments. We are interested in understanding reasons why reviewers might ***not use*** the form. Please share with us why you might ***not use*** the *Reviewer Recommendation Form*.

_____

- ☐ Never
- ☐ I do not know
- ☐ I prefer not to answer

15. How often does your group ***share concerns*** to the Nunavut Research Institute about a research license application? *(Select one from list)*

- ☐ Always (for every application)
- ☐ Usually
- ☐ Sometimes
- ☐ Never
- ☐ I do not know
- ☐ I prefer not to answer

15a. *[Only if **Always/Usually/Sometimes** is selected, please answer the following questions, otherwise skip to Question **18**]*
What are some of your main concerns you have shared with the Nunavut Research Institute about research license applications?

_____

15b. Do you feel that your concerns are addressed? Please explain:

_____

- ☐ I do not know
- ☐ I prefer not to answer

16. How often does your group ***request specific terms and conditions*** be attached to a research license for the projects that you review?
(Select one from list)

- ☐ Always (for every application)
- ☐ Usually
- ☐ Sometimes
- ☐ I do not know
- ☐ I prefer not to answer
- ☐ Never
- ☐ I do not know
- ☐ I prefer not to answer

16a. *[Only if **Always/Usually/Sometimes** is selected, please answer the following questions, otherwise skip to Question **19**]*
What are some of your main terms and conditions?

_____

16b. Do you feel that your terms and conditions are met? Please explain:

_____

17. Researchers are required to provide ***annual summary reports*** to the Nunavut Research Institute for each research license they hold. How often does your group receive annual reports from the Nunavut Research Institute *(Select one from list)*

- ☐ Always (for every license)
- ☐ Usually
- ☐ Sometimes
- ☐ Never
- ☐ I do not know
- ☐ I prefer not to answer

18. Select your level of agreement with the statements below.
[It will be a row of buttons beside each statement, and they just click the one that corresponds to level of agreement]

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	Not applicable	I do not know
The Nunavut Research Institute Reviewer Recommendation Form is helpful							
The Nunavut Research Institute provides enough information about each project for us to evaluate							
The Nunavut Research Institute responds to our questions or comments in a timely manner							
Research summaries use plain language that is not too technical							
We require help from people with **specific technical** expertise to evaluate some research license applications							
Inuktut translations are accurate enough for us to evaluate applications							

OPPORTUNITIES AND CHALLENGES

We welcome additional feedback on any aspects that you feel are working well in the research licensing review process, and parts that are not working so well. This section is **OPTIONAL** to complete. If you prefer to meet (by phone or Zoom) to discuss, please provide your contact information in the **Follow-up** section.

19. Please share any comments you have on:

What is working well in the research licensing review process?

_____

What does your group find challenging about the research licensing review process, and why?

_____

What can be done to address each challenge you face?

_____

What does your group want to see changed in the research licensing process?

_____

What would be good to keep the same in the research licensing process?

_____

Are there any other experiences or suggestions you want to share?

_____

FOLLOW-UP

20. Would your group like to receive updates on our project, and any reports that come from our work?

☐ Yes
☐ No

20a. *[If No, skip to #21]*

20b. *[If **Yes**, how would your group like to receive provide updates and results?]*

☐ Email (please provide email address(es))

_____

☐ Canada Post mail (please provide mailing address)

_____

21. Would your group be interested in sharing more details about your research license review experiences?

☐ Yes
☐ No

21a. *[If No, skip to **Confidentiality** section]*

21b. ***[If Yes, who is the main contact we can follow up with? Please provide their contact information:]***

Name: _____

Email: _____

Phone: _____

CONFIDENTIALITY

22. The Nunavut Research Institute will have access to all detailed survey responses. When we send the results to the Nunavut Research Institute, how do you want to be identified?
[select one]

- ☐ I want the name of my organization included so the Nunavut Research Institute knows these are our responses
- ☐ I want my organization to remain anonymous, so the Nunavut Research Institute **DOES NOT** know these are our responses

ACKNOWLEDGEMENTS

Feedback from review committees across Nunavut will be compiled and made publicly available in reports, publications, presentations, and social media. We would like to acknowledge your important contributions through this survey.

23. Can we include the name of your group (organization or committee) in public documents and presentations to acknowledge your time and feedback?

- ☐ Yes
- ☐ No

In addition, please select if you want:
[Select all that apply]

24. The names of all individual committee members included.
If so, please provide all names:

_____

The names of one individual included to represent the committee.
If so, please provide their name and their role (e.g. Manager, Secretary, Chair, etc.)

_____

- ☐ Quotes from open-ended responses to be ***anonymous***
- ☐ Quotes from open-ended responses to be ***attributed to your group/organization***
- ☐ If you would like quotes from your responses to be attributed in a different way, please specify here:

_____

- ☐ None of the above

Thank you for taking the time to provide your feedback on the research licensing review process in Nunavut.

Appendix 2.2: Survey materials - PDF Version of online survey (Inuktitut)

ᖃᐅᔨᓴᓂᐅᔪᖅ ᐱᖓᓱᓐᓂᑕᐅᔭᓄᑦ ᓄᓇᕗᒻᒥᐅᓂᖅ:
ᑐᑭᓯᐅᓂᖏᑦ ᓄᓇᕗᒻᒥ ᑎᒥᐅᔪᑦ ᐊᑐᖃᑕᖅᓯᒪᔪᑦ ᖃᐅᔨᓴᓂᔪᒪᑦ ᓯᐃᓴᖓᓂᑦ ᖃᑎᖃᕐᓂᔪᒪᑦ

Welcome! **We invite you to complete this survey if you are a member or a representative of a research license review committee in Nunavut. Please confirm the following before you start:**

ᑐᓴᒪᓯᑦ! ᐃᓕᓴᖅ ᐱᔨᑦᓱᖅᓯᓂᔪᒪᑦ ᑕᕐᓯᒥᓐᒃ ᖃᐅᔨᓴᓂᐅᔪᖅᑎᑦ ᐃᓕᑭᐅᐅᔪᐃᓐᑦ ᐅᕐᓂᒍᓴᓂᓕᑦ ᑭᒃᑯᖅᑐᐃᔪᐃᓐᑦ ᖃᐅᔨᓴᓂᔪᒪᑦ ᓯᐃᓴᖓᓂᑦ ᖃᑎᖃᕐᓂᔪᒪᑦ ᑲᑎᒪᔨᕆᓕᓂᑦ ᓄᓇᕗᒻᒥ. ᓇᓗᓇᐃᔭᑎᑦ ᐅᑯᐊ ᐱᑭᐊᓕᐅᖅᑎᓇᑎᑦ:

- ᐱᓯᒪᔪᖓ ᐊᐱᒪ ᐅᖃᓕᒫᓯᒪᓕᕐᓗᑎᑦ ᑎᑎᖅᑲᖅ ᑐᑭᓯᐊᕐᕈᑎᓂᑦ [https://straightupnorth.ca/making-research-work-fornunavummiut/] ᐱᑦᔨᐸᑎᖃᖅᑐᑦ ᑕᕐᓯᒥᖓᓂ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐᑦ ᑐᑭᓯᐊᕐᕈᑎᓂᑦᑐᑦ ᖃᐅᔨᓴᖅᑐᓕᕆᔨᑯᑦ ᐊᐱᒪ ᒪᑦᒥᒃᑐ ᓯᓚᑦᑐᒃᑯᓐᓂᒃ ᖃᐅᔨᓴᓂᔪᒪᑦ ᐊᐱᒪ ᒪᑦᒥᒃᑐ ᓯᓚᑦᑐᒃᑯᓐᓂᒃ ᓄᓇᕗᒻᒥ ᐃᓕᓴᕐᓂᐊᕐᓗᒍ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐᑦ.

  - ☐ ᐃᓐ
  - ☐ ᐊᖏᓗ

- *[ᐊᖏᓗᒍᕕᖅ]* ᐅᖃᓕᒫᓯᒪᓕᕐᓗᑎᑦ ᑎᑎᖅᑲᖅ ᑐᑭᓯᐊᕐᕈᑎᓂᑦ, ᐃᓕᓴᕐᓂᐊᕐᓗᒍ ᖃᓄᖅᑐᑦᑎᐊᓕᒫᖅ ᑎᑎᖅᑲᖅᖃᓂᑦᓗᒍ ᖃᐅᔨᓴᓂᔪᒪᑦ ᑕᕐᓯᒥᖓᓂ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐᑦ ᐊᐱᒪ ᒪᑦᒥᒃᑐ ᖃᐅᔨᓴᓂᔪᒪᑦ [https://straightupnorth.ca/making-research-work-for-nunavummiut/].

  - ☐ ᐃᓕᓴᕆ ᖃᒥᑦᑐᒍᓴᕆᓯᒪᔪᕐᓇᑎᑎᖅᑲᖅ ᑐᑭᓯᐊᕐᕈᑎᓂᑦ, ᐊᐱᒪ ᐊᑐᐃᓴᕆᕕᐅᓕᖅᑐᓂᒃ ᑲᔪᓯᑎᒥᓗᒍ ᖃᐅᔨᓴᓂᔪᒪᔪᖅ
  - ☐ ᑲᔪᓯᒍᒪᔪᑦᑐᒃᑯ ᖃᐅᔨᓴᓂᔪᒪᑦ
  - ☐ ᐊᐱᖅᓯᕆᓴᕆᓯᒪᔪᖅ ᐱᔨᑎᑎᖅᑲᖅᖃᓂᑦ ᐅᕐᓂᒃ ᐃᓕᒫᔪᐅᓂᒃᓄᑦ ᑕᕐᓂᓂ ᖃᐅᔨᓴᓂᔪᒪᑦ ᐊᐱᒪ ᐱᓕᓗᒍ ᓇᓗᓇᐃᔭᖅᓯᒪᓕᕆᔨᑲᓐᓂᒃ ᑕᕐᓂᓂ ᖃᐅᔨᓴᓂᔪᒪᑦ ᐊᐱᒪ ᐱᓕᓗᒍ ᑐᑭᓯᐊᕐᕈᑎᓂᑦᓗᒍ.

  - ☐ ᐃᓐ
  - ☐ ᐊᖏᓗ

- *[ᐊᖏᓗᒍᖅᑐᑦ]* ᐊᐱᖅᓯᕆᓴᕆᓯᒪᓕᕐᓂᔪᒪᑦ ᐃᕐᖃᑦ ᐃᓕᒫᔪᐅᓂᒃᓄᑦ ᑕᕐᓂᓂ ᖃᐅᔨᓴᓂᔪᒪᑦ ᐅᕐᓂᒍᓴᓂᓕᑦ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᓕᕆᔨᑲᓐᓂᒃ ᑕᑯᓚᓕᒫᓂᒃ, ᖃᐅᔨᓴᐅᔪᖅᑎᑦ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐᑦ

  - ☐ ᐃᓕᓴᕆ ᐊᐱᖅᔪᑎᑎᓕᕆᔨᖃᐅᔪᖅᑕᓂᑦ, ᐊᐱᒪ ᐅᑐᐃᓴᕆᕕᐅᓕᖅᑐᓂᒃ ᑲᔪᓯᑎᒥᓗᒍ ᖃᐅᔨᓴᓂᔪᒪᑦ
  - ☐ ᑲᔪᓯᒍᒪᔪᑦᑐᒃᑯ ᖃᐅᔨᓴᓂᔪᒪᑦ
  - ☐ ᐊᖏᓂᒃᑐᒃᑯ ᑲᔪᓯᓗᒃ ᖃᐅᔨᓴᓂᔪᒪᑦ, ᒪᓕᓐᓂᑎᑦ ᐅᖃᖅᓯᒪᓂᖏᑦ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᑦ ᑎᑎᖅᑲᖅᑐᑦ ᑐᑭᓯᐊᕐᕈᑎᖃᖅᑐᑦ.

  - ☐ ᐃᓐ
  - ☐ ᐊᖏᓗ

- *[ᐊᖏᓂᖅᑕᐃᓇᓚᐅᒍᑎᑦ, ᑲᔪᓯᓗᑎᒃ ᖃᐅᔨᓴᓂᔪᒪᑦ ᐊᐱᖅᔪᑎᑎᓂᔪᒪᑦ]*
- *[ᐊᖏᓗᒍᖅᑐᑦ/ᑲᔪᓯᑎᑐᒍᒪᔪᑦ ᓂᕈᐊᖅᑕᐅᓯᒪᔪᑦ ᓇᓕᓕᐊᖅᓂᐅᐃᓇᖅᓇᖅ ᓇᓕᕋᕐᕋᓴᓂᑦ ᖃᔪᓪᓚᖅ]*
- ᖃᓄᖅᓇᓗᑦ ᐃᓕᓐᓂᔪᖅᓇᕋᐃᐅᑦ ᑕᕐᓇᖅ ᖃᐅᔨᓴᓂᐅᔪᖅᑎᑦ. ᐊᐱᖅᔪᑎᑎᓂᖃᖅᑐᑦ ᐅᕐᓂᒃᑐᖅᑐᑦ ᐃᓐᓇᕐᓂᐊᕐᓗᒍ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐᑦ ᑎᑎᖅᑲᖅᑐᑦ ᐊᐱᒪ ᑎᑎᖅᑲᖅᖃᓂᑦ ᐃᓐᓇᕐᓂᐊᕐᓗᒍ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐᑦ ᐊᐱᒪ ᐱᓕᓗᒍ ᑐᑭᓯᐊᕐᕈᑎᓂᑦᓗᒍ ᐱᓕᕆᔨᐊᕐᕈᑎᖃᖅᑐ

ᑎᒥᐅᔨᖅ ᓇᓗᓇᐃᔭᖅᓯᒪᓂᖓᓂ

1. ᑭᓱᓪᓚ ᐊᑎᖏᓐ ᑎᒥᐅᔨᖅ (ᑲᑐᔪᕐᖓᑎᑦᑕ ᐅᕝᓪᓚᔨᓂᓕᕆᓂ ᑲᑎᒪᔨᕋᓱᒃᑲᓪᓚᑦ)?

_____

2. ᑭᓇ ᐱᔭᕆᖅᓯᓱᓪᓚ ᑕᕐᔪᓂᖓᓐᓄ ᐊᐱᖅᔪᑎᓂᓕ?

☐ ᐊᑕᐅᓱᖅ ᐃᓄᐃᑦ ᑭᓚᖅᑕᐃᓕᓐᓂᓂ ᑎᒥᐅᔨᓕᒥᑦ

2a. ᐊᑕᐅᓱᖅ ᐃᓄᐃᑦ ᑭᓚᖅᑕᐃᔪᓂ ᑎᒥᐅᔨᓕᒥᑦ, ᑲᑎᒪᔨᕋᓱᒃᑲᓪᓚᑦ ᑲᑎᒪᔨᒪᓕᕐᑦ ᐅᖃᐅᓱᖅᖃᑎᖏᓐᓄ ᑭᐅᔭᕋᓱᒃᑲᓪᓚ ᑭᐅᔾᔨᕋᓂᓐᓄ ᑭᐅᔭᕋᓱᒃᑲᓪᓚᑦ?

☐ ᐊᕐᕕᑐᐃᓐᓇᖅ – ᑭᐅᔾᔨᕋᓂᓐ ᑕᑯᔨᐅᑎᓂᑎᓪᓗᑎᑦ ᑭᐅᔾᔨᕋᑎᕐᓂᖅᓄᑦ ᑎᒥᓕᒻᒪᕆᒥᑦ
☐ ᐊᑲᓐ – ᐅᓪᓛᖅᓚ ᐱᓕᕆᔨᐊᖃᖅᑕᖅᓚᓂ ᑭᐅᔭᕋᓐᓇᖅᑐᓂᓚᖅ ᐅᖃᐅᔨᒪᔭᕐᓂᖅᓄᑦ ᐅᓂᒃᑳᖅᓯᒪᔭᕐᓂᖅ ᐃᓄᑐᐊᓕᒻᒪᓗᓂ
☐ ᐊᑕᐅᓱᖅ ᐃᓕᓴᐅᔭᕋᖅ ᑎᒥᐅᔨᕆᑦ – ᐊᓱᖅᑎᑦ ᑎᒥᐅᔨᕆᑦ ᐃᓕᓴᐅᔭᕋᓂ ᑭᐅᔭᕋᓐᓇᖅᑎᑦᓂ ᐃᓄᑐᐊᓕᒻᒪᓗᓂ
☐ ᐊᓱᖅᑎᑦ (ᓇᓗᓇᐃᔭᖅᓴᓕᑦ)

_____

ᖃᐅᔨᓴᖅᓴᒻᒪᑦ ᓕᐃᓴᖅᓯᒪᔪᑦ ᖃᓄᖅᑭᐅᓂᖅ

3. ᖃᖅᑎᓂᖅ ᖃᐅᔨᓴᖅᓴᒻᒪᑦ ᓕᐃᓴᖅᓱᑕᕐᓱᐊᕈᑎᓂᑦ ᑎᒥᐅᔨᖅ ᐱᖃᓕᑕᖅᑲ ᓄᓇᕗᒻᒥ ᖃᐅᔨᓴᖅᑐᑕᓪᓕᐊᔨᑯᓂᑦ ᐊᑦᑕᔪᑐᒪᓕᑦ? **(ᓂᕈᐊᖅᓴᓄᑦ ᐊᑕᐅᓱᒋᑎᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ)**

☐ 1–10
☐ 11–20
☐ 21–40
☐ 41–60
☐ ᐊᒥᓱᓂᖅᓴᓂᑦ 60
☐ ᖃᐅᔨᒪᔭᕐᑐᖅᓱ
☐ ᑭᐅᔾᔪᒪᔭᕐᑐᖅᓱ

4. ᑎᒥᔪᑎᑎᕆᐃᑦ ᖃᒥᓕᕈᑦᑕᖅᑲ ᐊᑕᔭᕐᓂᑐᑎᑦ ᑐᓴᕐᕋᐅᑎᑎᑦ ᐱᖃᓕᑕᖅᑕᑎᑦ ᓄᓇᕗᒻᒥ ᖃᐅᔨᓴᖅᑐᑕᓪᓕᐊᔨᑯᓂᑦ?

☐ **ᐃ**
☐ **ᐊᑲᓐ**

4a. **[ᐊᕐᕕᑐᐃᓐᓇᖅ, ᐅᕙᓪᓕᐊᔪᓕᑦᑕᑎᑦ *Question* 5]**

4b. ᐊᑲᓐᓗᐃᓐᓇᖅ, ᖃᖅᑎᑦ ᓕᐃᓴᖅᓱᑕᕐᓱᐊᕈᑎᓂᑦ ᑎᒥᐅᔨᕆᑦ ᖃᒥᓕᕈᑦᑕᖅᑲ ᑐᑦᓂᑦ ᐃᓄᑎᑎᑦ ᐃᖏᓂᑦ ᐱᖃᓕᑕᖅᑕᑎᑦ ᐃᓄᑐᐊᓕᒻᒪᓗᓂ? **(ᓂᕈᐊᖅᓴᓄᑦ ᐊᑕᐅᓱᒋᑎᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ)**

☐ ᐱᑕᖃᖅᑐᓂᑦ
☐ ᐃᓕᓐᓂᓂ (1-39%)
☐ ᓇᐸᐸᓕᕐᓂᑦ (40-60%)
☐ ᐊᒥᓱᓂᖅᓴᐃᑦ (61-99%)
☐ ᖃᐅᔨᒪᔭᕐᑐᖅᓱ
☐ ᑭᐅᔾᔪᒪᔭᕐᑐᖅᓱ

[>ᖃᓐᓇᐅᔭᓄᑦ ᓂᕈᐊᖅᑕᐅᔪᓂ, ᑭᐅᓗᑎᑦ ᐅᑯᐊ ᒪᑐᐃᓐᖓᓄᑦ ᐊᐱᖅᑯᓯᑎᑦ, ᐊᖏᒪ ᑲᔪᓯᓗᑎᑦ ᐅᕙᓪᓕ *Question* **5**]

4c. ᓇᓗᓇᐃᔨᓴᑎᑦ ᖃᓄᖅ ᑎᒥᑭᕐᐃᑦ ᐃᓱᒪᓕᐅᖃᖅᑕᕐᓂᖓᓄᑦ ᓯᐃᔨᓐᓂᑕᕐᓱᐊᕈᑎᓂᑦ ᑭᒥᓂᕈᑕᕐᓂᕆᔨᓄᑦ ᐅᕝᕙᓚᓐᓂᑦ ᐊᑦᖢᒃ.

_____

☐ ᑭᐅᔪᒪᔨᕐᑐᖓ

4d. ᑎᒍᑦ ᐊᑎᑐᖅᑕᐅᔭᕐᑦ ᑕᐅᓐᓯᒪᖓ ᐃᓱᒪᓕᐅᖃᓂᓴᒍᑦ? (ᓱᓕᓪ, ᖃᖓᑐᓄᓂᖓ ᐊᑎᕋᔪᒥ, ᐱᖁᑎᖃᖅᓂᕆᔨᓄᑦ ᑎᒥᐅᔨᑦ ᑲᑎᒪᓗᐊᖅ, ᐊᓄᓂᐅᓂᖓᖓ ᑐᑭᓯᐅᑎᓕᐅᕈᑦ, ᖃᐅᔨᓴᓂᓴᒍᑦ ᐱᓕᕆᔨᐅᔭᖅ, ᑐᓴᓇᖃᓂᓴᒍᑦ, ᐃᓕᓴᕆᔨᐅᔨᑦ ᐊᑐᐃᓐᓇᐅᔨᓂᕆᔨᓄᑦ, ᐊᓯᖏᓪᓗᒥ.)

_____

☐ ᑭᐅᔪᒪᔨᕐᑐᖓ

[ᐱᑕᖃᖏᕐᑐᖅᓂᕐᓂᑦ ᓂᕈᐊᖅᑕᐅᔪᓂ, ᑭᐅᓗᑎᑦ ᐅᑯᐊ ᒪᑐᐃᓐᖓᓄᑦ ᐊᐱᖅᑯᓯᑎᑦ, ᐊᖏᒪ ᐅᕙᓪᓕᖏᓐᓄᑦᓗᓂ *Question* **13**]

4e. ᑭᓯᑦ ᐊᑎᑐᖅᑕᐅᔭᕐᑦ ᐃᓕᓴᒃᑑᑦ ᐃᓱᒪᓕᐅᔨᓴᖓᓄᑦ ᑭᒥᓂᕈᑎᖓᔪᓂᑦ ᓯᐃᔨᓐᓂᑕᕐᓱᐊᕈᑎᓂᑦ? (ᓱᓕᓪ, ᖃᖓᑐᓄᓂᖓ ᐊᑎᕋᔪᒥ, ᐱᖁᑎᖃᖅᓂᕆᔨᓄᑦ ᑎᒥᐅᔨᑦ ᑲᑎᒪᓗᐊᖅ, ᐊᓄᓂᐅᓂᖓᖓ ᑐᑭᓯᐅᑎᓕᐅᕈᑦ, ᖃᐅᔨᓴᓂᓴᒍᑦ ᐱᓕᕆᔨᐅᔭᖅ, ᑐᓴᓇᖃᓂᓴᒍᑦ, ᐃᓕᓴᕆᔨᐅᔨᑦ ᐊᑐᐃᓐᓇᐅᔨᓂᕆᔨᓄᑦ, ᐊᓯᖏᓪᓗᒥ.)

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☐ ᑭᐅᔪᒪᔨᕐᑐᖓ

5. ᑎᒥᖁᓂᑎᔪᓂᑦ ᑭᒥᓂᕈᓕᕆᔨᒪᑕ ᖃᐅᔨᓴᓂᓴᒍᑦ ᓯᐃᔨᓐᓂᑕᕐᓱᐊᕈᑎᓂᑦ, ᐃᒪᓐᓇᐃᑦᑐᑦ:
(ᓂᕈᐊᖏᑕᐃᓐᓇᓗᓂᑦ ᐊᑐᖏᑐᓕᕆᔨᑦ)

☐ ᓇᓗᓇᐃᖏᓪᓗᒪᔪᑦ ᑲᑎᒪᓂᐅᔪᔪᑦ ᐊᑲᑭᑦᑕᐅᓪᓗᒪᔪᓂ ᑭᒥᓂᕈᓗᓂ ᐊᖏᒪ ᐅᖃᐅᓪᓗᖃᓕᓴᓂ ᑐᑭᓯᐅᑎᓂᓂᑦ
☐ ᐃᓕᓴᕆᔨᒃ ᑲᑎᒪᓂᐅᓂᖃᖅᑕᕐᓪᓗᒪᔪᓂᑦ ᐅᖃᐅᓕᕆᔨᖃᖅᓗᓂ ᐊᑲᓕᑎᒥᑐᑐᓂᑦ ᐱᓕᕆᔨᐅᔪᓂᑦ
☐ ᖃᓄᐃᓕᓴᕐᔪᓂᑦ
☐ ᑭᐅᔪᒪᔨᕐᑐᖓ
☐ ᐊᑲᓇᑕᑦ (ᓇᓗᓇᐃᔨᓴᑎᑦ)

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6. ᖃᓄᐊᑎᓇᑐᑐᓂ ᑲᑎᒪᖃᑦᑕᕆᔨᓪᓚᑦ ᑎᒥᑭᕐᐃᑦ ᑭᒥᓂᕈᑐᓂ ᖃᐅᔨᓴᓂᓴᒍᑦ ᓯᐃᔨᓐᓂᑕᕐᓱᐊᕈᑎᓂᑦ?
(ᓂᕈᐊᖓᔭᖅ ᐊᑕᐅᓯᖓᑦ ᑎᑎᕋᖅᓯᒪᔨᓂᑦ)

☐ ᐱᓇᓱᐊᕈᓯᑕᒫᑦ
☐ ᒪᓕᒃᑲ ᐱᓇᓱᐊᕈᓯᖅ (ᒪᓕᒃᓂᖅ ᐱᓇᓱᐊᕈᓯᑕᒫᑦ)
☐ ᑕᕆᑭᑕᒫᑦ
☐ ᐱᖁᐅᖏᑕᒫᖅᑕᐃᓐᓇᒪᑕ
☐ ᑲᑎᒪᖃᑦᑕᕐᓂᑐᐃᓂᓴᒍᑦ ᑐᑭᓯᐅᑎᓂᑦ ᑐᑭᓯᐅᓕᕐᓂᑦ
☐ ᖃᐅᔨᓴᒪᔨᕐᑐᖓ
☐ ᑭᐅᔪᒪᔨᕐᑐᖓ
☐ ᐊᑲᓇᑕᑦ (ᓇᓗᓇᐃᔨᓴᑎᑦ)

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6a. ᑲᑎᒪᖅᑕᕐᓂᓱᓴᕐ, ᐃᓕᓴᕆᐅᔪᓄᑦ ᑭᒥᑭᖅᑕᕐᓂᖅᑎᑦ ᐃᓄᑐᑦᓯᑎ, ᐅᕝᕙᓚᐅᖅᑐᑦ ᑭᒥᑭᖅᑕᕐᑕᕐᓂᓕᓴ?
ᓇ;ᓇᐃᕆᑦᓯᒍ.

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7. ᖃᓄᑎᒋ ᐊᑯᓂᐅᒪᔪᖅᑕᕐᓂᖅ ᐃᕝᕕᑦ ᑎᒥᖅᓴᓄᑦ ᑭᒥᑭᔭᓯᑎ **ᐊᑕᐅᓯᖏᑦ ᖃᐅᔨᓴᓂᖓᒍᑦ ᓕᐃᓴᓐᓯᑕᕋᓯᐊᕐᑭᑎᒥᑦ** (ᐱᖃᓯᐅᑎᓐᓯᓗᑎ ᐅᖃᓕᒫᑦᑕᐅᓂᕐᑎᑦ ᑐᐱᕋᐅᑎᓕᐅᕐᑦ, ᑲᑎᒪᓐᓯᓗᑎ ᐅᖃᐅᓯᖃᖅᑐᑎ, ᐅᖃᐅᓯᓴᓕᐊᕐᕋᖅᖃᓂᖅ, ᐊᐖᒪ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖃᑐᓕᔪᓐᓇᕐᓂᖅ ᖃᐅᔨᒪᑎᑦᑐᑦ ᐃᓕᓴᕐ ᐃᓯᒪᓕᐅᖅᑕᕐᓴᓂᑦ)?
(ᓂᕿᐊᖏᓐᓄᐸ ᐊᑕᐅᓯᖏᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ)

- ☐ 1–29 ᒥᓂᑦ
- ☐ 30–59 ᒥᓂᑦ
- ☐ 1–2 ᐃᑲᖏᕆᐃᑦ
- ☐ ᐊᒥᓱᓂᖅᓴᓂᑦ 2 ᐃᑲᖏᕆᐃᑦ
- ☐ ᖃᐅᔨᒪᔪᑦᑐᖅᓴ
- ☐ ᑭᐅᔭᒪᔪᑦᑐᖅᓴ
- ☐ ᑐᓴᓴᓂᖃᖅᑐᖅ ᑐᐱᕋᐅᑎᓕᐅᕐᒥᑦ, ᓇᓗᓇᐃᕆᑦᓯᓕᑦ

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8. ᑭᓇ ᑭᒥᑭᖅᑕᕐᓂᖅ ᖃᐅᔨᓴᓂᖓᓕᑦ ᓕᐃᓴᓐᓯᑕᕋᓯᐊᕐᑭᑎᒥᓂᑦ?
(ᓂᕿᐊᖏᓐᓄᐸ ᐊᑕᐅᓯᖏᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ)

- ☐ ᐃᓕᓴᕆᐅᔪᓕᒫᑦ ᑎᒥᐅᔪᒥᑦ
- ☐ ᐊᑕᐅᓯᖅ ᐃᓄᐃ ᑭᓴᖅᑐᑦᐃᐊᖅ ᑎᒥᐅᔪᒥᑦ
- ☐ ᑭᐅᔭᒪᔪᑦᑐᖅᓴ
- ☐ ᐊᐃᔨᑦᖃᑦᑕᕐᓂᑦᑐᑦ ᐊᑐᓂ, ᓇᓗᓇᐃᕆᑦᓯᓕᑦ

8a. ᐊᑕᐅᓯᐅᔪᓂ, ᑭᓯᓚᑦ ᐃᖅᑲᓇᐃᔨᒍ ᐊᑎᖓᑦᑐ/ᐱᓕᕆᔨᐊᓕᒫᖓᑦ ᑎᒥᐅᔪᒥᑦ?

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9. ᑎᒥᑎᔪᐃᑦ ᐊᑐᖏᑦᑕᕐᖏᑦ ᐊᒋᖁᔨᓪᓚᕆᔪᓂᑦ ᐅᕝᕙᓚᐅᖅᑐᑦ ᐊᓯᐊᓚᖓᔪᓂᒃ ᐃᑲᔪᖅᑐᑐᒍ ᖃᐅᔨᓴᖃᖅᑐᑦ ᖃᐅᔨᓴᓂᖓᓕᑦ ᑐᐱᕋᐅᑎᓕᐅᕐᒧᑐᑦ?

- ☐ **ᐃ**
- ☐ **ᐊᓚᒃ**
- ☐ **ᖃᐅᔨᓴᖓᓕᒫᒃ**

9a. **ᐊᖏᕈᕕᖅ**ᑦ, ᓇᓗᓇᐃᕆᑦᓯᒍᑦ ᖃᓄᐃᑦᑐᓴᒍᑕᐅᓂᓗᐊᑕᖓᑦ ᐊᓚᒍ ᑎᒥᑎᖅᓯᒪᔪᓕᑦ ᓇᓗ

9b. **ᐊᓚᐅᕈᕕᖅ**ᑦ **ᐅᕝᕙᓚᐅᖅᑐᑦ ᖃᐅᔨᓴᖓᓕᒫᒃ** [ᐅᐳᓐᖓᑦᓯᒍ *Question* **11**]

10. ᑎᒥᑎᓴᐃᑦ ᑲᑎᒪᖅᑎᖅᖃᑦ ᐊᐱᒪᐅᓂᓕᓂᓂᒃ ᐊᐅᓪᓚᕐᓗᓗᑎᑦ ᐊᓯᖏᓐᓄᓗ ᑲᑎᒪᖅᑎᖅᑐᓂᑦ ᐃᓕᓴᖅᑎᑦ ᓄᓇᓕᖕᒪᓗ ᖃᐅᔨᓕᕆᐊᒃᓴᑦ ᖃᐅᔨᓴᖅᑎᓂᒃᑯᑦ ᓇᐃᓴᖏᓪᓗᓂᒃᑯᑦ ᓇᐃᓐᓇᕐᓂᖅᐸᐃᑦᑐᑎᓂᑦ?

- ☐ **Ⅾ**
- ☐ **ᐊᐃᒐ**
- ☐ **ᖃᐅᔨᒪᖏᑦᑐᖓ**

10a. **ᐊᖏᕈᕕᐃᑦ**, ᑎᑎᕋᖅᓯᓂᑦ ᑲᑐᔨᖃᑎᒌᓕᓯᑦ ᐃᓕᓴᖅᑎᑦ ᓄᓇᓕᖕᒪᓗ ᐃᓕᓴᖅᑎᑦ ᑎᒥᖓᓄᑦ ᑲᑎᒪᖅᑎᖅᑐᑐᑦ ᐊᐱᒪᐅᓂᓕᓂᒃ ᐊᐅᓪᓚᕐᓗᑎᑎᓄᑦ ᖃᐅᔨᓕᕆᐊᒃᓴᑦ ᓇᐃᓴᖏᓪᓗᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑎᓂᒃᑯᑦ ᓇᐃᓐᓇᕐᓂᖅᐸᐃᑦᑐᑎᓂᑦ

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10b. **ᐊᓕᒍᕈᐃᑦ ᐅᖃᓪᓚᕆᓂᒃ ᖃᐅᔨᒪᖏᑦᑐᖓ** [ᐅᓂᒃᖏᓐᓂᒍᓐᓇᑎ *Question* **12**]

11. ᐃᓚᒋᑲᐅᓂᑦ ᐃᓕᓴᖅᑎᑦ ᑎᒥᖓᓄᑦ ᐊᐱᓕᕐᑕᐅᓪᓚᕆᑦᑐᑦ ᐱᕕᖓᖅᑎᖅᓯᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑎᓂᑦ ᓇᐃᓐᓇᕐᓂᑦ ᖃᐅᔨᓴᖅᓯᓂᑦ ᖃᐅᔨᓴᖅᑎᓂᑦ? **(ᓂᕆᐊᖅᓯᓄᑦ ᐊᑕᐅᓂᕐᒥᑦ ᑎᑎᕋᖅᓂᕐᒪᔪᓂᒃ)**

- ☐ Ⅾ. ᐊᑕᖏᖅᑐᑎ (ᐃᓚᒋᑦᓯᓂᐅᑦ ᐃᖅᑲᓇᐃᔨᖏᑦᑐᓄᑦ, ᑲᑎᒪᔨᕋᓱᓄᑦ ᐱᓕᕆᑎᐊᓕᖏᑦᑐᓄᑦ ᐊᓯᖏᑦᑐᓯ.)
- ☐ Ⅾ. ᐃᓚᖏᑦᓂᐅᕙᓪᓕᑐᖅ
- ☐ ᐊᐃᒐ, ᐊᐱᓕᕐᑕᐅᓂᖅᑲᖏᑦᑐᑐᖅ
- ☐ ᖃᐅᔨᒪᖏᑦᑐᖓ
- ☐ ᑭᐅᔪᒪᖏᑦᑐᖓ

12. ᐃᓚᒋᑲᐅᔪᓄᑦ ᐃᓕᓴᖅᑎᑦ ᑎᒥᖓᓂᑦ ᑭᓚᑦ ᐊᐱᓕᕐᑕᐅᓪᓚᕆᓪᓕᑐᖅ ᐱᐃᓴᖅᑎᖅᑐᑐᑦ ᖃᐅᔨᓴᖅᑎᓂᑦ ᓇᐃᓐᓇᕐᓂᑦ ᖃᐅᔨᓴᖅᓯᓂᑦ, ᖃᓄᖅ ᐊᐱᓕᕐᑕᐅᓪᓚᕆᓪᓕᑐᖅ? **(ᓂᕆᐊᖅᑕᐃᓕᓴᕐᓗᒍᑦ ᐊᑐᖅᑐᓕᒫᑦ)**

- ☐ ᐃᓚᒋᑦᓯᖓ ᐃᖅᑲᓇᐃᔨᖏᑦᑐᓄᑦ
- ☐ ᐃᓚᒋᑦᓯᖓ ᑲᑎᒪᔨᕋᓱᓄᑦ ᐱᓕᕆᑎᐊᓕᖏᑦᑐᓄᑦ ᐱᖓᓱᐅᔨᔪᓂᒃ ᐊᐱᓕᕐᑕᐅᓂᓴᑦ
- ☐ ᖃᐅᔨᒪᖏᑦᑐᖓ
- ☐ ᑭᐅᔪᒪᖏᑦᑐᖓ
- ☐ ᐊᓯᖏᑦᑐᓂ, ᓇᓗᓇᐃᔨᓴᒋᑦ

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ᑐᓴᐅᒪᖓᖅᓯᓂᖅ ᓄᓇᕗᒻᒥ ᖃᐅᔨᓴᖅᑐᑐᒃᓴᓂᒃᑯᑦ

13. ᓄᓇᕗᒻᒥ ᖃᐅᔨᓴᖅᑐᑐᒃᓴᓂᒃ ᐊᐅᓪᓚᕆᑎᑎᕐᓂᖅᑐᒥᒃ ᖃᐅᔨᓴᖅᓯᓂᑦ ᓇᐃᓴᖏᓪᓗᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᐅᓪᓚᑦ, ᐃᓱᒪᓕᕐᓂᐊᖅᑎᑎᕐᓂᖅᓴᖅᑎᑦ 30-45 ᐅᓪᓚᐃᑦ ᑎᒥᐅᔪᒥᑦ ᐱᓕᕆᖕᒥᐅᓪᓚᑦ ᐊᒻᒪ ᐅᑎᖅᑎᒥᐅᓪᓚᑦ ᖃᐅᔨᓴᐅᓄᑦ ᐊᑐᓕᖅᐸᐅᔪᓄᑦ ᑕᑕᑎᓗᐊᓕᒻᒥᑦ. ᐱᓕᕆᖕᒥᐅᓂᒃ ᐃᒪᓐᓇᐃᓕᓴᕐᓗᒍ: **(ᓂᕆᐊᖅᓯᓄᑦ ᐊᑕᐅᓂᕐᒥᑦ ᑎᑎᕋᖅᓂᕐᒪᔪᓂᒃ)**

- ☐ ᐅᓪᓗᒥᓇᐃᖅᑐᖓ ᖃᐅᔨᓴᐃᓕᓴᖅᓯᓂᑦ
- ☐ ᐅᓪᓗᒪᓕᕆᖅᑕᖅᑐᖓ ᖃᐅᔨᓴᐃᓕᓴᖅᑎᓂᑦ
- ☐ ᐃᓀᓐᓂᒃᑯᑦ ᐅᓪᓗᒥᖅᑕᖅᑐᖓ ᖃᐅᔨᓴᓂᑦ
- ☐ ᐅᓗᓚᐅᖅᓯᒪᔨᑐᖓ ᖃᐅᔨᓴᐃᓕᓴᖅᑎᓂᑦ
- ☐ ᑭᐅᔪᒪᖏᑦᑐᖓ
- ☐ ᐊᓯᖏᑦᑐᓂ, ᓇᓗᓇᐃᔨᓴᒋᑦ:

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14. ᖃᓄᐃᑎ ᑎᒥᑦᓴᐃᓄᑦ **ᑐᓴᖅᑎᑦᕈᐃᔨᓂᖅᖃᖅᑕᖅᑐᑦ** ᓯᐃᓴᓐᓂᒋᑦᓯᐊᕐᑐᑎᓂᑦ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑐᑦᓯᓗᒃᑐᓄᑦ?
(ᓂᕆᐊᖅᓯᓄᐅ ᐊᑕᐅᓯᖏᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ)

- ☐ ᐱᑕᖃᖅᑎᑎᓴᓇᖅᑐᑦ (ᑐᓵᓯᕋᐅᑎᓕᒻᒥᓂᑦ)
- ☐ ᐱᑕᖃᖅᑎᑦᑎᐊᓵᓕᑦ
- ☐ ᐃᓕᓴᕐᓂᐅᓐᒋᑦ
- ☐ ᐱᓵᓱᖅᑐᐃᒍᑦ ᐊᑐᓕᕐᓂᐊᕐᓂᑦ ᑕᑕᑎᓚᐊᓕᕐᓂᐅ
- ☐ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐅᖃᐅᓯᕐᓱᐃᑦ ᖃᕋᓴᐅᓵᓐᓇᖅᑐᑦ
- ☐ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐅᖃᐅᓯᕐᓱᐃᑦ ᓯᑲᓂᐅᑦ
- ☐ ᐅᖃᓕᓕᐅᑎᓂᑦ
- ☐ ᐃᓄᑦᑎᒍᑦ
- ☐ ᖃᐅᔨᒪᔭᑦᑐᖓ
- ☐ ᑭᐅᔨᒪᔭᑦᑐᖓ
- ☐ ᐊᓯᖏᑦ, ᓇᓗᓇᐃᔨᓐᓗᑦ:

14a. [**ᐅᓇᑐᐊᖓᔪᒍᓂ ᐱᑕᖃᖅᑎᑎᓴᓇᖅᑐᑦ/ ᐱᑕᖃᖅᑎᑦᑎᐊᓵᓕᑦᑐᑦ/ᐃᓕᓴᕐᓂᐅᓐᒋᑦ ᓂᕆᐊᖅᑕᕐᕕᒃᒍᑎ**, ᑭᐅᓗᑦ ᐅᓂᐊ ᐊᐱᖅᓂᒋᑦ, ᐊᓯᐊᓕᓵᖓᔪᓐᓗᑦ *Question* **17**]

ᖃᓄᖅ ᐱᑕᖃᖅᑎᑎᑦᐸᑦᐱᑦᑕ ᐅᖃᐅᓯᕐᓱᑎᑦ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑐᑦᓯᓗᒃᑐᓄᑦ?

[**ᐅᓇᑐᐊᖓᔪᒍᓂ ᑭᓯᑐᐃᓴᓐᓇᖅᑎᑦ ᐊᓯᖏᑦᓴᓂ "ᖃᑎᒌᑦᓯᒍ ᐊᑐᓕᓵᓂᐅᕐᓂᖅ ᑕᑕᑎᓚᐊᓕᕐᓂᐅ ᓂᕆᐊᖅᑕᕐᕕᒃᒍᑎ**, ᑭᐅᓗᑦ ᐅᓂᐊ ᐊᐱᖅᓂᒋᑦ, ᐊᓯᐊᓕᓵᖓᔪᓐᓗᑦ *Question* **17**]

14b. ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑐᑦᓯᓗᒃᑐᓄᑦ ᐱᑕᖃᖅᑎᑦᑎᐊᓵᓂᖅᓯᒪᓂᑦ ᖃᑎᒌᑦᓯᒍ ᐊᑐᓕᓵᓂᐅᕐᓂᖅᓯᒪᓂᑦ ᑕᑕᑎᓚᐊᓕᕐᓂᐅᑦ ᐃᑲᔪᓐᓇᖅᑐᓂᑦᑎᐊᓕ ᓇᓗᓇᐃᔨᓴᖅᑐᑦᓯᓗᒃᑐᓄᑦ. ᑐᓵᓯᕋᐅᑎᓕᒻᒥᓂᑦ ᐃᓚᖓᑕᑦ ᐱᓕᕆᑦ ᐊᑐᓕᓵᓂᐅᕐᓂᖅᓯᒪᓂᑦ ᖃᑎᒌᑦᓯᒍ ᐊᑐᓕᓵᓂᐅᕐᓂᖅᓯᒪᓂᑦ ᑕᑕᑎᓚᐊᓕᕐᓂᐅᑦ ᐱᓕᕆᑦ ᐊᑐᓕᓵᓂᐅᕐᓂᖅᓯᒪᓂᑦ ᖃᑎᒌᑦᓯᒍ ᐊᑐᓕᓵᓂᐅᕐᓂᖅᓯᒪᓂᑦ ᑕᑕᑎᓚᐊᓕᕐᓂᐅᑦ:

- ☐ ᐱᓕᕐᓂᖅᑕᕐᕕᒃᒍᑎᓂᑦ
- ☐ ᖃᐅᔨᒪᔭᑦᑐᖓ
- ☐ ᑭᐅᔨᒪᔭᑦᑐᖓ

15. ᖃᓄᐃᑎ ᑎᒥᑦᓴᐃᓄᑦᑎᐊᑦ **ᐅᑐᓂᓯᓴᐅᑦᑐᑦ ᐃᓕᓴᕐᓗᑕᐅᔨᓂᑦ** ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑐᑦᓯᓗᒃᑐᓄᑦ ᐱᓯᔪᓐᓇᖅᖃᖅᑐᑦᓯᓗᒃᑐᓄᑦ ᖃᐅᔨᓴᓂᑦᒧᑦ ᓯᐃᓴᓐᓂᒋᑦᓯᐊᕐᑐᑎᓂᑦ?
(ᓂᕆᐊᖅᓯᓄᐅ ᐊᑕᐅᓯᖏᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ)

- ☐ ᐱᑕᖃᖅᑎᑎᓴᓇᖅᑐᑦ
- ☐ ᐱᑕᖃᖅᑎᑦᑎᐊᓵᓕᑦᑐᑦ
- ☐ ᐃᓕᓴᕐᓂᐅᓐᒋᑦ
- ☐ ᐱᓕᕐᓂᖅᑕᕐᕕᒃᒍᑎᓂᑦ
- ☐ ᖃᐅᔨᒪᔭᑦᑐᖓ
- ☐ ᑭᐅᔨᒪᔭᑦᑐᖓ

15a. **ᐅᓄᐊᑐᐊᑦ ᐱᑕᖅᑎᑎᓵᓚᖅᑐᑦ**, ᐱᑕᖅᑎᑎᑎᑎᒍᓴᑦᑐᑦ ᓂᕈᐊᖅᑕᐅᔭᒍᑎ, ᑭᐅᓗᑦᑎᑦ ᐅᓄᓇ ᐊᐱᖅᓄᑦ, ᐊᓯᐊᓂᔪᓐᓇᓗᑐᒍ *Question* **18**]

ᑭᓱᓕᑦ ᐃᓕᓴᖅᑎᓄᐃᓚᒥᓪᓗᐊᖅᑕᑎᑦ ᑐᓂᓯᒪᔭᑎᑦ ᑭᓱᓕᑦ ᐃᓕᓴᖅᑎᓄᐃᓚᒥᓪᓗᐊᖅᑕᑎᑦ ᑐᓂᓯᒪᔭᑎᑦ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑐᓕᕆᔨᓄᑦᓯᐊᓘᑎᖃᖅᑐᓂᑦ ᖃᐅᔨᓴᓂᒍᑦ ᓪᑕᐱᓴᕐᑕᕐᓯᐊᕈᑎᓂᑦ?

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15b. ᐃᓱᐊᒍᓂᓂᖃᖅᑭᑦ ᐃᓕᓴᖅᑎᑎᑦ ᐱᓕᕆᐊᖅᑐᓴᒍᑎ? ᓇᓗᓇᐃᔪᓐᓇᑎ

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☐ ᖃᐅᔨᒪᓂᑐᖅ
☐ ᑭᐅᔾᔨᒪᓂᑐᖅ

16. ᖃᓄᐊᑦᑎᑎᓚᓂᑐᑎᑦ ᑎᒥᔪᑎᑎᕐᓴᐃᖅ ᑐᓴᕐᕋᖃᑦᑕᖃᑦ ᓇᓗᓇᐃᖅᓯᒪᔨᓂᑦ ᐊᑯᓂᐅᓂᖓᓂᓗᓂᑦ ᐊᒥᒪ ᖃᓄᐃᓂᓂᒪᔪᐊᓕᖅᑎᓗᓂᑦ ᐱᖃᓯᐅᓴᐅᓕᒪᓕᕐᖃᑦ ᖃᐅᔨᓴᓂᒍᑦ ᓪᓚᕆᔨᓂᑦ ᐱᓕᕆᐊᓗᑦ ᐱᓪᓚᕐᓯᐅᑦᑕᐅᓂᑦ? **(ᓂᕈᐊᖅᓗᓄ ᐊᑕᐅᓯᖅᑎᑦ ᑎᑎᕋᖅᓯᒪᔨᓂᑦ)**

☐ ᐱᑕᖅᑎᑎᓵᓚᖅᑐᑦ (ᑐᓴᕐᕋᐅᑎᓕᒻᒥᓂᑦ)
☐ ᐱᑕᖅᑎᑎᑎᑎᒍᓴᑦᑐᑦ
☐ ᐃᓕᓴᕐᓂᐅᔭᓂᑦ
☐ ᐱᓇᓴᖅᑕᓕᐅᖅᓯᒪᔾᔪᑎᑦᑐᑦ
☐ ᖃᐅᔨᒪᓂᑐᖅ
☐ ᑭᐅᔾᔨᒪᓂᑐᖅ

16a. **ᐅᓄᐊᑐᐊᑦ ᐱᑕᖅᑎᑎᓵᓚᖅᑐᑦ**, ᐱᑕᖅᑎᑎᑎᑎᒍᓴᑦᑐᑦ ᓂᕈᐊᖅᑕᐅᔭᒍᑎ, ᑭᐅᓗᑦᑎᑦ ᐅᓄᓇ ᐊᐱᖅᓄᑦ, ᐊᓯᐊᓂᔪᓐᓇᓗᑐᒍ *Question* **19**]

ᑭᓱᓕᑦ ᐃᓕᓴᖅᑎᓄᐃᓚᒥᓪᓗᐊᖅᑕᑎᑦ ᐊᑯᓂᐅᓂᖓᓂᓗᓂᑦ ᐊᒥᒪ ᖃᓄᐃᓂᓂᒪᔪᐊᓕᖅᑎᓗᓂᑦ?

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16b. ᐃᓱᐊᒍᓴᐃᑦ ᐊᑯᓂᐅᓂᖓᓂᓗᓂᑦ ᐊᒥᒪ ᖃᓄᐃᓂᓂᒪᔪᐊᓕᖅᑎᓗᓂᑦ ᑎᑭᑕᐅᔾᓴᒪᓕᒻᒥᑕ? ᓇᓗᓇᐃᐅᔾᔨᒪᓂᑐᖅ

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17. ᖃᐅᔨᓴᖅᑎᑦ ᐱᑕᖃᓕᖃᖅᑎᑎᑭᑎᑭᖅᑐᑦ **ᐊᑦᖏᔪᒋᒪᑦ** ᓇᓗᓇᐃᐅᔾᔨᖅᓯᒪᔨᓂᑦᑐᑦ ᐅᓂᒃᑲᓂᑦ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑎᓂᑦ ᓪᓚᕆᔨᓂᑦ ᐱᔪᓐᓇᖅᑐᑦ. ᖃᓄᐊᑦᑎᖅᑐᖃᑦᑕᖅᑐᒍᑎ ᑎᑎᕈᐃᓕᑦ ᐱᑕᖅᑎᑎᑎᑎᒍᓴᑦᑐᑦ ᐊᑦᖏᔪᒋᒪᑦ ᐅᓂᒃᑲᓂᑦ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑎᑐᓪᓚᕆᔨᓂᑦ **(ᓂᕈᐊᖅᓗᓄ ᐊᑕᐅᓯᖅᑎᑦ ᑎᑎᕋᖅᓯᒪᔨᓂᑦ)**

☐ ᐱᑕᖅᑎᑎᓵᓚᖅᑐᑦ (ᓪᓚᕆᔨᓂᑦᑐᓕᒻᒥᓂᑦ)
☐ ᐱᑕᖅᑎᑎᑎᑎᒍᓴᑦᑐᑦ
☐ ᐃᓕᓴᕐᓂᐅᔭᓂᑦ
☐ ᐱᓇᓴᖅᑕᓕᐅᖅᓯᒪᔾᔪᑎᑦᑐᑦ
☐ ᖃᐅᔨᒪᓂᑐᖅ
☐ ᑭᐅᔾᔨᒪᓂᑐᖅ

18. ᓂᑐᐊᖅᓗᒍ ᖃᓄᖕᓂᓕᕆᓂᖅᐸᒃ ᐊᖏᕐᕋᑎᕐᓂᒃ ᐅᓂᒃᑲᓂᒃ ᐊᒡᒐᓂ.

	ᐊᖏᕐᕋᑎᑎ ᓯᑎᐊᕋᑕᖅ	ᐃᓕᓴᐃᒃ ᐊᖏᕐᕋᑕᖅ	ᕿᑎᐊᓂᓐᑐᕋ	ᐃᓕᓴᐃᒃ ᐊᖏᕐᕋᑎᑎᕐᑕᖅ	ᐊᖏᕐᕋᑎᑎ ᖁᑎᓚᐊᕋᑕᖅ	ᐊᑐᖏᓯᑐᕋ	ᕋᐅᕐᓯᑐᑐᕐᓴᖅ
ᓄᓇᕗᒻᒥ ᕋᐅᓴᕐᕋᑕᒥᓚᓴᕐᔪᓂ ᕿᒥᔅᑭᐅᓴᒃ ᐊᑐᓚᐅᓂᒃ ᑕᑕᑎᓚᐊᓕᒻᒥᐅ ᐃᑲᔪᑎᕋᕐᕋᒃ							
ᓄᓇᕗᒻᒥ ᕋᐅᓴᕐᕋᑕᒥᓚᓴᕐᔪᓂ ᐱᑕᕋᕐᑎᑎᔪᓂ ᓇᓗᓯᑐᓂ ᑐᑭᓯᐊᕐᑎᓂᕐᕋᕐᓂ ᐊᑐᓂ ᐱᓕᓚᐊᓂ ᐅᐊᖅᑎᓂᒃ ᕋᐅᓴᕐᕋᑕᖅᓯᒪᔪ							
ᓄᓇᕗᒻᒥ ᕋᐅᓴᕐᕋᑕᒥᓚᓴᕐᔪᓂ ᕿᐅᕋᓯᑕᕐᑐᓂ ᐅᐊᓪᓚᓂ ᐊᐱᕐᔨᑎᑎᓂᕐᓂᒃ ᐅᕋᐅᓴᕐᓂᒃ ᐅᕋᐅᓴᕐᕋᑕᖅ ᑭᓲᐊᕐᓯᑐᑐᕐᓂᒃ							
ᕋᐅᓴᕐᓂᓕᒻᒥ ᓄᓇᓕᐃᑲᕐᓗᒃᑐᓂᒃ ᐊᒡᒐᓂᒃ ᐅᕋᕋᓯᑕᕐᑐᓂ ᐅᕋᐅᓴᕐᓂᒃ ᑭᓲᐊᕐᓯᑐᑐᕐᓂᒃ							
ᐃᑲᔪᕐᑕᐅᓴᓂᐊᕋᕐᓗᒍ ᐃᓄᓐᓂᒃ ᓄᓇᓕᐃᑲᕐᓗᒃᑐᓂᒃ ᕋᐅᓴᕐᓂᒃ ᕋᐅᓴᕐᕋᑕᖅ ᓄᓇᓕᐃᑲᕐᓗᒃᑐᓂᒃ ᐃᓕᓴᕐᓂ ᕋᐅᓴᕐᓂᓕᒻᒥ ᓕᐃᓴᔪᓯᒡᓴᐊᐅᑎᓂᒃ							
ᐃᓄᓐᓂᒃ ᑐᑭᓯᓇᕐᓯᑎᑕᐅᓯᒪᔪᓂ ᐱᓕᑎᐊᕐᓯᒪᓂᕐᓂᒃ ᓇᓗᓯᑐᓂᒃ ᐅᐊᖅᑎᓂᒃ ᕋᐅᓴᕐᕋᑕᖅ ᑐᑭᓯᓇᕐᓯᑎᑕᐅᓂᒃ							

ᐱᕕᓴᐅᓂᓇᖅᑐᒃ ᐊᒻᒪ ᐊᓴᔨᕈᑕᐅᓂᒃ

ᑐᓂᖓᓯᑎᑎᕆᔨᒍᒃ ᐅᖃᐅᔨᓴᓴᓂᓐᓂᒃ ᖃᓄᐃᑎᑐᑐᐃᓂᓇᖅᓂ ᐃᓕᒪᑎᖅᐅᔨᓂᒃ ᐃᖅᐱᑎᖅᐅᓂᒃ ᐱᓂᓇᐃᑎᐊᕈᑐᑐᑐᒍᓂᒃ ᖃᐅᔨᓴᓂᓕᒻᒥ ᓕᐃᓴᔪᓯᒡᓴᑎᑎᓂᒃ ᖃᐅᔨᓴᓂᕐᒥᒃ ᐱᓂᓇᐃᑎᐊᕈᑐᑐᑐᒍᓂᒃ. ᐅᓇ ᐃᓕ ᓇᓪᓕᔅᓴᓴᓐᖅ ᐱᓴᓱᖅᓯᓗᒍ. ᑲᑎᖃᖅᑐᒃᓴᑭᒪᒍᒃᓴᓂᒃ (ᐅᖃᓕᐅᑎᑎᔨᑯᐅᐸᓪᓚᔪᓂᒃ ᐊᓗ Zoom) ᐅᖃᐅᔨᓯᒪᓗᒍ, ᑐᓂᓗᑎᒃ ᑐᐱᔨᓯᐊᕐᐅᓐᓄᑦ)ᓇᖅᑐᒃ ᑐᐱᔨᓯᐊᕐᑎᑎᓂᒃ ᖃᐅᔨᓴᑎᐊᕐᑲᒃᑐᓂᓂᓂᓕᒻᒥ ᐃᓕᓴᐃᓂ.

19. ᑐᓂᓯᔪᑎ ᖃᓄᐃᑦᑐᑐᐃᓐᓇᖅᑎᓂ ᐅᖃᐅᓯᕐᓴᓂᓕ ᐱᓕᕆᔨᖃᑦᑐᑕ ᐅᑯᓂᖓ:

ᑭᓯᑦ ᐱᓕᓐᓇᑎᐊᖅᑲᑦ ᖃᐅᔨᓴᓂᖏᓐᓂ ᓯᐃᓴᖅᓯᖃᕆᐊᖃᓂᖏᓐᓂ ᖁᑎᖅᑐᓂᖏᓐᓂ ᐱᓕᕆᔨᖃᑦᑐᑕ?

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ᑎᒥᑦᓴᐃᑦ ᖃᓄᐃᑦᑐᓂᑦ ᐊᑦᓯᕐᕕᑎᖃᖅᑲᑦ ᐱᓕᕆᔨᖃᑦᑐᑕ ᖃᐅᔨᓴᓂᖏᓐᓂ ᓯᐃᓴᖅᓯᖃᕆᐊᖃᓂᖏᓐᓂ ᖁᑎᖅᑐᓂᖏᓐᓂ, ᐊᐱᒪ ᓄᓪᓕᑦ?

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ᑭᓯᑦ ᖃᓄᐃᓕᓴᐅᓕᓐᓇᖅᑲᑦ ᐱᓕᓀᐊᖃᖅᓯᓗᑎ ᐊᑐᓂ ᐃᓐᖃᑦ ᐊᑦᓯᕐᕕᑎᑎᓴᖅᑐᓂᖓ?

_____

ᑎᒥᑦᓴᐃᑦ ᖃᓄᐃᑦᑐᓂᑦ ᑕᑯᔪᒪᓐᓂᑦ ᐊᓯᔪᖅᑐᑦᑐᓂᑦ ᓯᐅᔨᓴᓂᖏᓐᓂ ᓯᓚᕆᔨᖃᑦᑐᑕ ᖁᑎᖅᑐᓂᖏᓐᓂᓗᑦ?

_____

ᑭᓯᑦ ᐱᐅᓱᖅᑲᑦ ᐱᓗᒪᓗᑦ ᐊᑦᔨᒋᔭᓗᑎ ᓯᐅᔨᓴᓂᖏᓐᓂ ᓚᐃᓴᖅᓯᖃᕆᐊᖃᓂᖏᓐᓂ ᖁᑎᖅᑐᓂᖏᓐᓂᓗᑦ?

_____

ᐱᑕᖃᖅᑲ ᐊᓯᖏᑦᑐᓂ ᐊᑐᖃᑦᑕᕐᓯᒪᓴᖅᑐᓂ ᐅᖃᓪᓚᕆᓂ ᐅᖃᐅᔨᔨᑎᐊᑐᑎᓂ ᐃᑦᓇᓚᐅᑦ ᑐᓂᓯᒪᓴᖅᑐᓂᖓ?

_____

ᖃᐅᔨᑎᐊᖅᑲᓂᖅ

20. ᑎᒥᑦᓴᐃᑦ ᐱᖃᑦᑕᒪᓀᑦ ᑐᑭᓯᑎᐊᑐᑎᓂ ᐃᓐᖃᑦ ᐱᓕᓀᐊᖓᓕᒃ, ᐊᐱᒪ ᖃᓄᐃᑦᑐᑐᐃᓐᓇᖅᑎᓂ ᐅᓂᒃᑲᓂ ᐅᓀᒋᑦ ᐃᖅᓱᒪᓂᖅᑐᑦ?

☐ **ᐃᓗ**
☐ **ᐊᐱᒐ**

20a. [ᐊᐱᒻᒪᑕᐃᑦ, ᐅᓄᖓᓪᓗᑎ *Question* **21**]

20b. **ᐊᖏᕈᑕᐃᑦ**, ᖃᓄᖅ ᑎᒥᑦᓴᐃᑦ ᐱᖃᑦᑕᒪᓀᑦ ᑐᑭᓯᑎᐊᑐᑎᓂ ᐊᐱᒪ ᖃᓄᐃᓐᓂᓚᖏᓐᓂ?

☐ ᖃᕋᓴᐅᓵᓱᑦ (ᖃᕋᓴᐅᓵᓱᑦ ᑐᑭᑐᑎᖃᖅᑐᓂᖏᓪᓗᑎᓂ)

_____

☐ ᑲᓇᑕᒥ ᑎᑎᖅᑲᓂᐊᖅᓱᑦ (ᑐᑭᑐᑎᖃᖅᑐᓂᖏᓪᓗᑎᓂ)

_____

21. ᑎᒥᑦᓴᐃᑦ ᐱᔪᒪᓂᖃᕋᖅᑲᑲᓐ ᐃᓕᓴᕐᓴᐅᖃᑕᐅᓂᑦ ᓱᓕᓂᕐᓂᒥ ᐊᐱᖅᓱᓂᑦ ᐅᓀᒋᑦᓯᓂ ᑎᒥᐅᔪᓂ ᑲᑎᒪᓂᖅᓴᓂᑦ ᐃᓚᖓᑕᐅᓂᑦ ᐊᑐᖃᑦᑕᕐᓯᒪᓴᖅᑐᓂᖓ?

☐ **ᐃᓗ**
☐ **ᐊᐱᒐ**

21a. [ᐊᑦᑎᓯᒪᕐᓂᖅ, ᐅᓂᓐᖓᑦᓯᓗᑎ ᑲᓐᕿᓇᖅᑐᓕᕆᓂᖅᓯᒪᑦ ᐃᓕᖓ]

21b. ᐊᖏᕐᓯᒪᕐᓂᖅ, ᑭᓇᐅᓐᓄ ᖃᐅᔨᓴᕐᓯᐊᓕᒃᓴᓪᓗᐊᑕᐅᔪᖅ ᖃᐅᔨᓴᕐᓯᐊᓕᕆᔨᓇᖅᑐᓂᒃᓴᑦ? ᐱᑕᖃᖅᑎᕐᕕᑐᑎ ᑐᑭᓯᓴᕐᓯᐊᓕᖅᖢᓂᓇᑦ ᑐᑭᓯᓴᕐᓯᐊᕐᑎᖅᖢᓂᓂᓕ:

ᐊᑎᖓ _____

ᖃᕆᑲᐅᔨᓂᑦ ᑐᕐᕈᑎᖓ _____

ᐅᖃᓕᐅᑎᖓᑕ ᓇᓴᐅᑎᖅᑕ _____

ᑲᓐᓇᐃᓇᖅᑐᓕᕆᓂᖅᓴᒪᑦ

22. ᓄᓇᕗᑦ ᖃᐅᔨᓴᖃᑐᓗᔨᓂᑦ ᐱᔪᓇᓂᕈᑎᑐᑦ ᐊᑕᖅᑭᖃᑐᑦ ᓇᓗᓇᐃᔭᖃᓕᖅᖢᓂᓇᑦ ᖃᐅᔨᓴᖃᑐᑦ ᑭᐅᔭᕋᓂᒃ. ᐊᐅᓚᑦᑎᓂᕐᒪᑐᐃ ᖃᓄᐃᓐᓂᑕᓴᖅᑭᑦ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖃᑐᑦᑎᓂᓗᒍ, ᖃᓄᖅ ᓇᓗᓇᐃᖅᑕᐅᔪᓂᖃᖅᑐᑦ? **[ᓂᕈᐊᖅᓗᑎ ᐊᑕᐅᓂᖅᑎᑦ]**

☐ ᐊᑎᖓ ᑲᑐᔨᖃᖏᑎᒍᑦ ᐱᖃᓐᓇᖅᑐᓗᓂ ᑕᒃᓂᐊ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖃᑐᑦᑎᓂᓗᒍ ᖃᐅᔨᓕᒫᓕᑦ ᑕᒃᓂᐊ ᑭᐅᔭᕋᓂᒃ

☐ ᑲᑐᔨᖃᖏᑎᒋᔭᖅ ᐊᑎᖓ ᖃᐅᔨᓕᕆᐅᓂᓂᕐᑕᕋ, ᑐᑭᓂᐊ ᓄᓇᕗᑦ ᖃᐅᔨᓴᖃᑐᑦᑎᓂᓗᒍ ᖃᐅᔨᓕᓂᐊᕐᓂᒫᑦ ᑕᒃᓂᐊᓄᖓ ᐅᓂᒡᓗᓂ ᑭᐅᔭᕋᓂᒃ ᑭᐅᔭᕋᓂᒃ

ᐃᓕᓴᕆᔨᐅᔪᑦ

ᑐᓴᕐᖃᖏᑦᑐᐅᔪᑦ ᑭᒥᕐᑐᓂᓕᒫᑦ ᑲᑎᒪᔨᕋᓱᓂᑦ ᓄᓇᕗᓂᒍᒪᑦ (ᑲᑐᔨᖃᖏᑎᒋᔭᖅ ᐅᕝᕙᓚᐅᓂᑦ ᑲᑎᒪᔨᕋᓱᓂᑦ) ᑭᐅᔭᕋᐃᓐᓇᓕᓂᑦ ᑎᑎᕋᖅᑕᐅᓂᒪᔪᓂᑦ ᐊᒥᓱ ᑕᓯᐊᐅᑎᑕᐅᔪᓂᑦ ᐃᓕᓴᕆᔨᐅᔪᓂᑦ ᐱᖓᓱᖃᖅᑐᓂᒃ ᐊᖏᔪᓂᑦ ᑐᑭᓯᓴᕐᓯᐊᓕᖅᖢᓂᓇᑦ?

☐ **ᐃᓗ**
☐ **ᐊᑎᓚ**

24. ᐃᓕᑎᐊᕐᓚᒍ, ᓂᕈᐊᕐᓚᑎ ᐱᔪᒪᔭᐃᑦ:
(ᓂᕈᐊᖅᑕᐃᓐᓇᓚᑦ ᐊᑐᖅᑐᓕᒫᑦ)

ᐊᑎᖓᑦ ᐃᓄᑐᐊᔭᑎᑦ ᑲᑎᒪᔨᕋᓱᓂᑦ ᐃᓕᑎᖃᐅᔨᑦ ᐱᖓᓱᐅᔨᔨᐅᑦ ᐊᖏᔪᓂᑦ ᐊᖏᕐᓯᒪᕐᓂᖅ, ᐊᑎᖓᑦ ᑐᑭᓯᑦ:

_____

`ᐊᑎᖓᑦ ᐃᓄᑐᐊᔭᑎᑦ ᐊᖏᔪᓂᑦ ᑭᒃᓱᖅᑐᐃᑦ ᑲᑎᒪᔨᕋᓱᓂᑦ ᐊᖏᕐᓯᒪᕐᓂᖅ, ᑐᑭᓯᓴᕐᓯᐊᓕᖅᖢᓂᓇᑦ (ᓱᓕᓚ, ᐊᐅᓚᑦᑎᓂᒃ, ᑎᑎᕋᖅᑕᒃ, ᐃᓕᓴᕐᓂᐊᕐᓂᖅ, ᐊᓱᓴᐅᑕᖅ, ᐊᓱᓴᓚ):

_____

- ᐅᖃᖅᑕᐅᓯᒪᔪᓕ ᑐᑦᓯᒐᑎᑕᑐᐊᖏᓂᐊᖅᑐᑦ ᑲᑐᔨᖃᖅᑎᑭᒧᑦ, ᐃᓄᐊᖏᒍᑕᐅᖅᑎᑦᑐᓄᓕᒃ, ᐊᓯᐊᓂ ᐱᓪᒪᒍᕕᓐᓄᑦ ᐊᖏᔪᖅᑎᑦᑕᖏᓂ, ᓇᓗᓇᐃᔅᓗᒍ ᐅᐸᓂ
- ᐅᖃᖅᑕᐅᓯᒪᔪᓕ ᐃᖏᕕᓕ ᑭᐅᔨᔪᑎᖅᑎᓂᓂ ᑐᑦᓯᒐᑎᑕᐅᓗᑎ ᐊᓯᐊᒍᑦ, ᓇᓗᓇᐃᔅᓗᒍ ᐅᐸᓂ:

- ᐱᑕᖃᖅᑎᑦᑐᑦ ᖃᓪᓗᓈᑦᑐᑦ

ᖃᓄᖅᓇᒃᑲᐅᖅ ᐱᕕᒃᓴᖅᓯᓇᕐᓂᑦ ᑐᓴᖅᑎᑦᑎᓂᖅᖃᖅᑐᑎᑦ ᖃᐅᔨᓴᓂᖅᓗᑦ ᓭᐃᓴᒃᓯᓂᑎᓂᖅᓗᑦ ᖃᓄᖅᑎᑦᑎᓂᖅᓗᑦ ᐱᐸᒃᓯᐊᓂᖅᓱᓄᑦ.

Appendix 2.3: Survey recruitment materials – Project overview

Making research work for Nunavummiut:

Understanding community group experiences with research license review

Do you review Nunavut Research Institute (NRI) research license applications? Would you like to help improve the review process? If so, we want to hear from you!

Project Overview

For many years we have heard community concerns related to research fatigue and the need for improved consultation and engagement of Nunavummiut in research processes.

Some of these concerns have focused specifically on the process of review, evaluation, and approval, of research licensed by the NRI.

We want to learn about your experiences with the research license review process, and what you would like to see improved.

To do this we have developed a survey to get input from review committees across Nunavut. Our goal in this work is to improve NRI operations and better support community organizations involved in license review.

We invite you to complete a short (30 minute) survey if you are a member or a representative of a research license review committee in Nunavut.

See next page for details.



Objectives

1. Identify the factors contributing to research fatigue and saturation in Nunavut;
2. Design new ways to track and improve the relevance and benefits of research to Nunavummiut;
3. Develop new reporting and communication tools to improve the accessibility of research results for community members, organizations, and decision-makers;
4. Develop recommendations for the respectful use of Inuit Qaujimajatuqangit in all research processes; and,
5. Create training and mentorship resources to enhance research capacity in Nunavut.

McMaster University

Carleton UNIVERSITY

How to complete the survey?

(Submit by December 16, 2022)

- **Online** in English with this survey link: [https://carletonu.az1.qualtrics.com/jfe/form/SV_esolKlmfpiljc7s]
- **PDF fillable form** in English or Inuktut: fill in digitally and submit by email
- **PDF to print** in English or Inuktut: print and complete by hand, scan or take photos of the hard copy and submit by email
- **By phone** in English or Inuktut: If you request an interpreter costs will be covered by the project
- **By Fax** in English and Inuktut: print and complete by hand, and send to 867-456-8672

Who can complete the survey?

Members of a group (organization or committee) that reviews research licenses for the NRI can complete the survey questions:

- **Individually** (i.e. multiple survey responses from one group); or,
- **Individually** (i.e. one person designated on behalf of the group, and responding based on their own experience); or,
- **As a group** (i.e. one person responding on behalf of the group, based on group discussion of questions).

For print or phone surveys, contact:

Alexis Polidoro
PhD Student, School of Earth, Environment, and Society, McMaster University
polidoraemcmaster.ca | (905) 741-2963
https://straightupnorth.ca/making-research-work-for-nunavummiut/

Jade Owen
Manager, Research Design and Policy Development
Nunavut Research Institute
Iqaluit, Nunavut
Jade.Owen@arcticcollege.ca
(867) 979-7202



Gita Ljubicic
Supervisor of Alexis Polidoro
Associate Professor
McMaster University
Hamilton, Ontario
gita.ljubicic@mcmaster.ca
(289) 659-2074

Appendix 2.4: Survey recruitment materials – Letter of information

Letter of Information

Project Title

Making research work for Nunavummiut:
Understanding community group experiences with research license review

What is this project about?

For many years we have heard community concerns related to research fatigue and the need for improved consultation and engagement of Nunavummiut in research processes. Some of these concerns have focused specifically on the process of review, evaluation, and approval, of research licensed by the Nunavut Research Institute.

This project was developed to learn about community group experiences with the research license review process, and what can be improved. As a starting point, we created a survey to get input from review committees across Nunavut. As part of your role as a research license review organization, the Nunavut Research Institute invites you to participate in this survey. Our goal in this work is to improve Nunavut Research Institute operations and better support organizations involved in license review.

What is this survey about?

- Basic information about your group (organization or committee)
- Your research license review process (number of reviews, time involved, and how you evaluate applications)
- Your communications with the Nunavut Research Institute
- Opportunities and challenges you would like to share about the research license review process



Who is involved in this project?

This project is co-led by researchers at the Nunavut Research Institute and McMaster University. This work is a part of a broader project focused on "Making research work for Nunavummiut", supported through close collaboration with Qaujigiartiit Health Research Centre, Nunavut Tunngavik Incorporated, the Arviat Aqqiumavvik Society, and Carleton University. **Alexis Polidoro (PhD Student at McMaster University) is leading this survey portion of the project.** Our main research funding comes from the Social Science and Humanities Research Council of Canada.

Letter of Information

How long will the survey take?

The survey will take approximately 30 minutes to complete. However, you may need to take some time to discuss the questions as a group before you respond.

Who can complete the survey?

If you are part of a group (organization or committee) that reviews research license applications sent to you by the Nunavut Research Institute, you are invited to complete this survey. You can answer questions:

- **Individually** (i.e. multiple survey responses from one group); or,
- **Individually** (i.e. one person designated on behalf of the group, and responding based on their own experience); or,
- **As a group** (i.e. one person responding on behalf of the group, based on group discussion of questions).



How to complete the survey?

If your internet connection is stable and you are comfortable completing the survey online in English, **you can complete the questions with this link:**
[https://carletonu.az1.qualtrics.com/jfe/form/SV_esolKImfpiljc7s]

Other options for completing the questions in English or Inuktut include:

- **A PDF form that you can fill in** digitally and submit by email
- **A PDF form that you can print** and complete by hand, then scan (or take photos) and submit by email
- **A phone call** to go through questions orally

To receive support with the online survey, to request the PDF form, or to schedule a time to complete the survey by phone, **contact Alexis Polidoro (see Project Contacts below).** If you would like an interpreter for the phone survey, you can select an interpreter in your community and the costs will be covered by the project.

Submit your responses by December 16, 2022 so they can be included in project results!

Letter of Information



What are the benefits?

Your feedback will help to improve the research licensing review process, Nunavut Research Institute operations, and community research consultation and engagement.

Are there any risks?

There are no known risks to being involved in this project. You can choose to participate (or not). At the end of the survey you can select to remain anonymous, which means that your organization will not be associated with your responses.

Reciprocity

Completing this survey is voluntary and there is no direct compensation. In reciprocity, we have provided your organization a copy of the Nunavut-wide and community-specific research trends reports (if you have not yet received these from Jamal Shirley, please contact Alexis Polidoro). If you wish to receive updates on this project, and a report on the survey results, you can request this at the end of the survey. Your feedback will help the Nunavut Research Institute to improve the review license process, which can ultimately ease the burden of research review on your organization and better support you in your reviewing role.

Who will know what I said?

Survey results will be compiled and made publicly available in reports, publications, presentations, and social media. If requested, the name of your organization and/or individual committee members will be included in acknowledgements (you can decide at the end of the survey). The only people who will see detailed survey responses in Qualtrics are McMaster researchers (Alexis Polidoro, Gita Ljubicic, and Natalie Carter). Jade Owen and Jamal Shirley are the only Nunavut Research Institute staff who will have access to survey responses. If requested, the name of your organization will be removed before responses are shared with the Nunavut Research Institute (you can decide at the end of the survey).

What if I change my mind about being involved?

You can stop the survey at any time, and you can request to withdraw your answers up to two months after completing the survey. There are no consequences to you or your organization if you choose to stop or withdraw.

Letter of Information

How are you protecting my privacy?

Information provided in the online questionnaire will be stored securely in the Qualtrics survey software according to their data protection policy. Translators who assist with telephone surveys will complete a confidentiality agreement. PDF or scanned hard copy responses sent by email will be immediately saved on password protected computers, entered into Qualtrics software, and then deleted from email servers.



Research ethics

This study has been reviewed by the McMaster University Research Ethics Board and received ethics clearance. If you have concerns or questions about your rights as a participant or about the way the study is conducted, contact:
McMaster Research Ethics Secretariat
c/o Research Office for Administrative Development and Support
Telephone: (905) 525-9140 ext. 23142
E-mail: ethicsoffice@mcmaster.ca

Project Contacts

Jade Owen
Manager, Research Design and Policy Development
Nunavut Research Institute
Iqaluit, Nunavut
Jade.Owen@arcticcollege.ca
(867) 979-7202

Alexis Polidoro
PhD Student, School of Earth, Environment, and Society
McMaster University
Hamilton, Ontario
polidora@mcmaster.ca
(905) 741-2963

NUNAVUNMI ILISAIVIAT COLLÈGE DE L'ARCTIQUE DU NUNAVUT
NUNAVUT ARCTIC COLLEGE

SSHRC CRSH

CANADA RESEARCH CHAIRS
CHAIRES DE RECHERCHE DU CANADA

NSTP PFSN

Appendix 2.5: Survey recruitment materials – Initial email blast sent from NRI

Dear Reviewer,

My name is Jade Owen, and I'm the new Manager of Research Design at the Nunavut Research Institute (NRI). As I start this new position, I am working with Alexis Polidoro (PhD student at McMaster University) to get feedback on the research licensing review process. Our goal in this work is to improve NRI operations and better support community organizations involved in license review.

Your organization is listed as regularly reviewing Scientific Research License applications. So we are inviting your research review committee to participate in a short survey. It will take approximately 30 minutes to complete, but you may need some time to discuss as a committee before you respond to the questions.

This survey is part of a larger project called "Making research work for Nunavummiut", led by Jamal Shirley (Director at NRI and Science Advisor for Nunavut) and Gita Ljubicic (Professor at McMaster University). This project is also supported by Qaujigiartiit Health Research Centre, Nunavut Tunngavik Inc., the Arviat Aqqiumavvik Society, and Carleton University.

For more information, please see the attached Project Overview and Letter of Information. If you have any questions, please reach out to Alexis or me by email or phone.

Once you have reviewed the project information carefully, we invite you to complete the survey by December 16, 2022. This survey is voluntary and you can respond online using this link: [https://carletonu.az1.qualtrics.com/jfe/form/SV_esoIKImfpiljc7s].

If you prefer to complete the survey by phone, or using a hard copy or fillable pdf document, please contact Alexis (905-741-2963, polidora@mcmaster.ca).

You will receive a follow-up email reminder from Alexis in three weeks. Alexis may also reach out by phone to confirm that you received this invitation, and to see if you have any questions.

We are grateful for all your work in reviewing research license applications. We look forward to your feedback in this survey so we can better support you and make sure that research is working for your community.

Thank you so much,

Jade Owen

Manager, Research Design & Policy Development

Nunavut Research Institute, Nunavut Arctic College

PO Box 1720, Iqaluit, Nunavut

X0A-0H0

Jade.Owen@arcticcollege.ca

(867) 979-7202

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PO BOX 1720, ᐃᖃᓗᐃᑦ, ᓄᓇᕗᑦ

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Appendix 2.6: Survey recruitment materials – Follow-up email

Hello,

My name is Alexis Polidoro and I am a PhD student at McMaster University. I am working on a research project that is co-led by Jade Owen at the Nunavut Research Institute and my supervisor Gita Ljubicic at McMaster University.

I am writing to follow up about an email that Jade sent on [November 14th, 2022]. Jade was inviting you to participate in a survey on your experiences with the research licensing review process in Nunavut.

Please see the original email below, and attachments. If you are having trouble with the online survey link, or if you wish to receive a pdf version please let me know. I'm also happy to talk on the phone or meet on Zoom if you have questions or concerns.

We look forward to your feedback in this survey so we can better support you and make sure that research is working for your community.

Sincerely,

Alexis Polidoro

PhD Student, School of Earth, Environment and Society

McMaster University

Hamilton, Ontario

(905) 741-2963

Polidora@mcmaster.ca

https://straightupnorth.ca/making-research-work-for-nunavummiut/

Appendix 2.7: Survey recruitment materials – Phone follow-up script

Hello,
My name is Alexis Polidoro and I am a PhD student at McMaster University in Hamilton. I am working on a research project that is co-led by Jade Owen at the Nunavut Research Institute and my supervisor Gita Ljubicic at McMaster University.

I am calling to follow up about an email Jade sent on [date]. Jade was inviting you to participate in a survey on your experiences with the research licensing review process in Nunavut.

Did you receive the email?

- If not, provide a brief summary of the project based on the Project Overview document, and confirm that the email will be sent again so they have all project details and the Letter of Information about the survey. Ask if they have any questions, and also remind them of December 17 deadline.
- If yes, ask if they have any questions about the survey and if they are having any trouble with the online survey link (also offer pdf and phone survey options, as per the Project Overview document). Address questions/concerns, and also remind them of December 17 deadline.

Thank you for your time, and we look forward to your feedback.

Hi again, it's Alexis from McMaster University in Hamilton.

I am following up about our call a few weeks back, on behalf of the Nunavut Research Institute. Because your organization reviews research license applications for the NRI, you were invited to complete a survey to share your experiences and feedback.

I noticed the survey [has not been started yet OR was started and hasn't been submitted yet] and I just wanted to check in again to see if you have any questions? Or are you having any issues with the survey link?

Depending on their response:

- offer again about the fillable pdf, hard copy, or phone survey options
- ask if they need more time to complete (i.e. into January)

We really appreciate any feedback you have to help improve the research licensing process. Don't hesitate to reach out if you have more questions or need help with anything.

Thank you for your time.

Appendix 3.1: Interview recruitment materials – Project overview

Making research work for Nunavummiut:

Understanding community group experiences with research license review

Have you reviewed Nunavut Research Institute (NRI) research license applications? Would you like to help improve the review process?
If so, we want to hear from you!

Project Overview

For many years we have heard community concerns related to research fatigue and the need for improved consultation and engagement of Nunavummiut in research processes.

Some of these concerns have focused specifically on the process of review, evaluation, and approval, of research licensed by the NRI.

We want to learn about your experiences with the research license review process, and what you would like to see improved.

To do this we have developed an interview to get input from review committees across Nunavut. Our goal in this work is to improve NRI operations and better support community organizations involved in license review.

We invite you to complete a 1-2 hour interview if you are (or previously was) a member or a representative of a research license review committee in Nunavut.

See next page for details.



Objectives

1. Identify the factors contributing to research fatigue and saturation in Nunavut;
2. Design new ways to track and improve the relevance and benefits of research to Nunavummiut;
3. Develop new reporting and communication tools to improve the accessibility of research results for community members, organizations, and decision-makers;
4. Develop recommendations for the respectful use of Inuit Qaujimajatuqangit in all research processes; and,
5. Create training and mentorship resources to enhance research capacity in Nunavut.

McMaster University

Carleton UNIVERSITY

Interested in participating?

- **Respond to the email** you received from Alexis Polidoro (polidora@mcmaster.ca)
- **Indicate your preferred method** for an interview (Zoom, phone call)
- **Provide your availability** for when is a good time to schedule the interview
- **Check your email** for the confirmed interview time and connection link (or phone number)
- **At the time of the interview,** be ready in a comfortable, quiet location with your computer or phone

For more information, contact:

Alexis Polidoro
PhD Student, School of Earth, Environment, and Society, McMaster University
polidora@mcmaster.ca | (905) 741-2963
https://straightupnorth.ca/making-research-work-for-nunavummiut/

Jade Owen
Manager, Research Design and Policy Development
Nunavut Research Institute
Iqaluit, Nunavut
Jade.Owen@arcticcollege.ca
(867) 979-7202



Gita Ljubicic
Supervisor of Alexis Polidoro
Associate Professor
McMaster University
Hamilton, Ontario
gita.ljubicic@mcmaser.ca
(289) 659-2074

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NUNAVUT ARCTIC COLLEGE
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CANADA RESEARCH CHAIRS CHAIRES DE RECHERCHE DU CANADA
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Appendix 3.2: Interview recruitment materials – Letter of information

Letter of Information

Project Title

Making research work for Nunavummiut: Understanding community group experiences with research license review

What is this project about?

For many years we have heard community concerns related to research fatigue and the need for improved consultation and engagement of Nunavummiut in research processes. Some of these concerns have focused specifically on the process of review, evaluation, and approval, of research licensed by the Nunavut Research Institute (NRI).

This project was developed to learn about community group experiences with the research license review process, and what can be improved. As a starting point, we created interview questions to get input from review committees across Nunavut. As part of your role (or previous role) at a research license review organization, the Nunavut Research Institute invites you to participate in this interview. Our goal in this work is to improve Nunavut Research Institute operations and better support organizations involved in license review.

What is this interview about?

- Your experience with receiving and reviewing research license applications from the NRI
- Communications with the NRI
- Opportunities and challenges you would like to share about the research license review process
- Recommendations for improving future review processes in Nunavut



Who is involved in this project?

This project is co-led by researchers at the Nunavut Research Institute and McMaster University. This work is a part of a broader project focused on "Making research work for Nunavummiut", supported through close collaboration with Qaujigiartiit Health Research Centre, Nunavut Tunngavik Incorporated, the Arviat Aqqiumavvik Society, and Carleton University. ***Alexis Beltrano (PhD Student at McMaster University) is leading this interview portion of the project.*** Our main research funding comes from the Social Science and Humanities Research Council of Canada.

Letter of Information

How long will the Interview take?

The interview will take approximately 1-2 hours to complete. However, if you are only available for a specific time, we can modify accordingly.

Who can complete the Interview?

The following individuals are invited to participate in this interview:

- ***If you are part of a group*** (organization or committee) that reviews research license applications sent to you by the Nunavut Research Institute.
- ***If you were previously involved*** (employment, volunteer, etc) by a group (organization or committee) that reviews research licenses sent to you by the Nunavut Research Institute



How to complete the Interview?

Interviews will take place via telephone or video call. If you prefer to complete the interview using a video call, we will use a platform of your choice (e.g. Zoom) that will be arranged when it is convenient for you.
If you prefer to complete the interview using a telephone call, we will arrange a time and appropriate number to reach you. If you would like an interpreter for the telephone interview, you can select an interpreter in your community and the costs will be covered by the project.
I will be asking a series of questions regarding your unique experiences with receiving and reviewing research license applications from the NRI, how feedback is provided to researchers, terms and conditions on a research license, results sharing, and recommendations for future review processes in Nunavut.
With your permission, audio and/or video will be recorded. I will discuss and confirm these details with you at the beginning of the interview, and recording can be stopped at any time during the interview.

Letter of Information



What are the benefits?

Your feedback will help to improve the research licensing review process, Nunavut Research Institute operations, and community research consultation and engagement.

Are there any risks?

There are no known risks to being involved in this project. You can choose to participate (or not). In the consent form, you can select to remain anonymous, which means that your identity and your organization will not be associated with your responses.

Reciprocity

Individuals who are interviewed will receive a $100 honorarium for their time. In reciprocity, we have provided your organization a digital and hard copy of the Nunavut-wide and community-specific research trends reports (if you have not yet received these, contact Alexis Polidoro).

Who will know what I said?

Interview results will be compiled and made publicly available in reports, publications, presentations, and social media. If requested, your name and name of your organization will be included in the acknowledgments. The only McMaster researchers who will have access to your interview responses are Alexis Polidoro, Gita Ljubicic, and Natalie Carter. Jade Owen and Jamal Shirley are the only Nunavut Research Institute staff who will have access to your interview responses. If requested, your identity and the name of your organization will be removed before responses are shared with the Nunavut Research Institute (you can decide end of the interview).

What if I change my mind about being involved?

Your participation in this interview is voluntary. You can choose to skip questions, and continue to be involved in the project based on your comfort level. You can also choose to stop or withdraw from the interview at any time, and you can choose to withdraw some or all of your responses up to two months after receiving your transcript to review.

If you decide to withdraw, there will be no consequences to you. In case of withdrawal, anything you have shared will be destroyed unless indicated otherwise. Selections of recordings and transcripts can be removed at your request.

Your decision to participate in this interview (or not) ***WILL NOT impact your continued access to support from the NRI, in any way.***

Letter of Information

How are you protecting my privacy?

Recordings and transcripts will be stored and encrypted on password-protected computers of the researchers involved. Long term storage, access, and future uses will be determined by the Nunavut Research Institute.



Research ethics

This study has been reviewed by the McMaster University Research Ethics Board and received ethics clearance (protocol #6602). If you have concerns or questions about your rights as a participant or about the way the study is conducted, contact:

McMaster Research Ethics Secretariat
c/o Research Office for Administrative Development and Support
Telephone: (905) 525-9140 ext. 23142
E-mail: ethicsoffice@mcmaster.ca

Project Contacts

Jade Owen
Manager, Research Design and Policy Development
Nunavut Research Institute
Iqaluit, Nunavut
Jade.Owen@arcticcollege.ca
(867) 979-7202

Alexis Beltrano
PhD Student, School of Earth, Environment, and Society
McMaster University
Hamilton, Ontario
polidora@mcmaster.ca
(905) 741-2963

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NUNAVUT ARCTIC COLLEGE

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CANADA RESEARCH CHAIRS
CHAIRES DE RECHERCHE DU CANADA

NSTP PFSN

Appendix 3.3: Interview recruitment materials – Email for current reviewers

Hello,

My name is Alexis Polidoro and I am a PhD student at McMaster University in Hamilton. I am working on a research project that is co-led by Jade Owen at the Nunavut Research Institute (NRI) and my supervisor Gita Ljubicic at McMaster University. Our goal in this work is to improve NRI operations and better support community organizations involved in license review.

I am sending this email as a follow-up to our previous correspondence regarding a survey on your organization's experience with research license review applications from the Nunavut Research Institute. After receiving a number of completed surveys, we are moving forward with interviews to learn more about the research license review process.

I am inviting you to an interview, which is part of the second phase of a larger project called "Making research work for Nunavummiut", led by Jamal Shirley (Director at NRI and Science Advisor for Nunavut) and Gita Ljubicic (Professor at McMaster University). This project is also supported by Qaujigiartiit Health Research Centre, Nunavut Tunngavik Inc., the Arviat Aqqiumavvik Society, and Carleton University.

The interview would take place over the phone, or online via Zoom. It's also possible we could have an interview in person if you are based in Iqaluit, or if we attend the same conference or meeting in the near future. The interview will take approximately two hours to complete, and you will be compensated $100 for your time. As part of the consent process, you can choose your information and the name of your current and/or former organization to remain anonymous. You have the right to withdraw at any time during the interview, and you may also choose to withdraw your responses up to two months after receiving the transcript for your review.

Please see attached a letter of information that provides more context. Once you have reviewed the project information carefully, please reach out to coordinate with me (Alexis. 905-741-2963, polidora@mcmaster.ca) if you have any questions or wish to schedule an interview. If you prefer to complete the interview in Inuktut or Inuinnaqtun, please let me know and I can arrange for an interpreter.

I will reach out by phone in a few weeks to confirm that you received this invitation, and to see if you have any questions.

The NRI is grateful for all your work in reviewing research license applications. We look forward to your feedback in this interview so we can better support you and make sure that research is working for your community.

Qujannamiik,
Alexis Polidoro
PhD Student
McMaster University
1280 Main Street West, Hamilton, ON
L8S 4L8
polidora@mcmaster.ca
(905) 741 2963

Appendix 3.4: Recruitment materials – Email for previous reviewers

Hello _____,
My name is Alexis Polidoro and I am a PhD student at McMaster University in Hamilton. I am working on a research project that is co-led by Jade Owen at the Nunavut Research Institute (NRI) and my supervisor Gita Ljubicic at McMaster University. Our goal in this work is to improve NRI operations and better support community organizations involved in license review.

You are receiving this email as you were identified by the NRI as having previously reviewed Scientific Research License applications in a former position with _____ [tailor to each person] . Our project began with a survey of current license review experiences, and we are now expanding to conduct interviews with current and past reviewers to learn more about the research license review process.

I am inviting you to an interview, which is part of the second phase of a larger project called "Making research work for Nunavummiut", led by Jamal Shirley (Director at NRI and Science Advisor for Nunavut) and Gita Ljubicic (Professor at McMaster University). This project is also supported by Qaujigiartiit Health Research Centre, Nunavut Tunngavik Inc., the Arviat Aqqiumavvik Society, and Carleton University.

The interview would take place over the phone, or online via Zoom. It's also possible we could have an interview in person if you are based in Iqaluit, or if we attend the same conference or meeting in the near future. The interview will take approximately two hours to complete, and you will be compensated $100 for your time. As part of the consent process, you can choose your information and the name of your current and/or former organization to remain anonymous. You have the right to withdraw at any time during the interview, and you may also choose to withdraw your responses up to two months after receiving the transcript for your review. Please see attached a letter of information that provides more context. Once you have reviewed the project information carefully, please reach out to coordinate with me (Alexis. 905-741-2963, polidora@mcmaster.ca) if you have any questions or wish to schedule an interview. If you prefer to complete the interview in Inuktut or Inuinnaqtun, please let me know and I can arrange for an interpreter.

I will reach out by phone in a few weeks to confirm that you received this invitation, and to see if you have any questions. The NRI is grateful for all your work in reviewing research license applications. We look forward to your feedback in this interview so we can better support you and make sure that research is working for your community.

Qujannamiik,
Alexis Polidoro
PhD Student
McMaster University
1280 Main Street West, Hamilton, ON
L8S 4L8
polidora@mcmaster.ca
(905) 741 2963

Appendix 3.5: Interview recruitment materials – Phone follow-up script

Hello,

My name is Alexis Polidoro, and I am a PhD student at McMaster University in Hamilton. I am working on a research project that is co-led by Jade Owen at the Nunavut Research Institute and my supervisor Gita Ljubicic at McMaster University. You may remember me from our previous interactions regarding participation in a survey on your experiences with the research licensing review process in Nunavut.

[IF THEY ARE PREVIOUS EMPLOYEES OR DID NOT PARTICIPATE IN THE SURVEY]. We have been working on this project since November 2022 to gather insights and feedback about the current research licensing review process in Nunavut. The first phase of this research was the survey, and now we are facilitating our second phase, which includes interviewing previous employees of an organization that reviews NRI licenses, and those who did not complete the survey.

I am calling to follow up about an email I sent on [date]. I was inviting you to participate in an interview to discuss the research license review process within your organization.

Did you receive the email?

- **If not**, did you complete a survey from the NRI to share your feedback on the research license review process?
    - If they have completed a survey: provide a summary of the survey, they completed previously and confirm that the email will be sent again so they have all project details and information about the project. Ask if they have any questions, and also remind them of our tentative deadline to complete interviews (spring 2024).
    - If they did not complete a survey: Provide an overview of the project and the survey and offer to share the letter of information regarding the survey if they wish to learn more about the details and information about the project. If they are interested in participating, ask if they have any questions and remind them of the tentative deadline to complete interviews (spring 2024).
- **If yes**, ask if they have any questions about the interview and if they would be interested in scheduling an interview (also offer translation services). Address questions/concerns, and also remind them of spring 2024 deadline. Also remind the participants that the interview will take approximately two hours to complete, and they will be compensated for their time. The interview will be anonymized, and they have the right to withdraw at any time during the interview, and up to two months after receiving the transcript for your review.

Thank you for your time, and we look forward to your feedback.

Appendix 3.6: Interview materials – Consent form

Welcoming statements/ preamble
Good morning/ afternoon. Thank you for taking the time out of your day to participate in this study. Your insights and experiences with the research license review process are important for our understanding of how we can work towards improving the research licensing process in Nunavut.

Prior to beginning the interview, I would like to check if you have reviewed the letter of information and consent form?

[If yes, continue]
[If no, review basics together]

Do you have any questions about the project or the interview?
Also, before we start, I'd like to make it clear that the information and experiences you share in this interview will be used for research purposes only and will be treated with respect and confidentiality. At the end of the interview, you will be able to choose whether you want your information shared with the Nunavut Research Institute, as well as if you want to be named or remain anonymous in the presentation of results. I commit to ensuring your privacy and protecting your identity based on your responses in the consent form at the end of the interview. At no point will your name [or name of the review organization] be shared, disclosed, or published unless otherwise specified by yourself.

The purpose of this interview today is to learn about your experiences with the research license review process in Nunavut. I am interested in hearing about your unique experience with receiving and reviewing research license applications from the NRI, how feedback is provided to researchers, terms and conditions on a research license, results sharing, and recommendations for future review processes in Nunavut.

Keeping these topics in mind, I want to emphasize that there are no right or wrong answers. Please share as much as you feel comfortable with, and if at any point you feel uncomfortable or wish to withdraw, I will conclude the session and delete all audio recordings from this interview. If you choose to stop the interview you will still be compensated for your time.
I want to thank you once again for your willingness to share your experiences with the research license review process in Nunavut. Your knowledge will contribute to the future management and administration of research in the territory.

[Get oral consent for the type of recording they are comfortable with, and reiterate that at the end in the consent form they can indicate how/if recordings are used]

Appendix 3.7: Interview materials – Interview guide

Welcoming statements/ preamble

Good morning/ afternoon. Thank you for taking the time out of your day to participate in this study. The insights and experiences with the research license review process are important for our understanding of how we can work towards improving the Nunavut Research Institute's (NRI) research licensing process in Nunavut. Prior to beginning the interview, I would like to acknowledge that this interview will remain confidential, and the NRI will be made aware of the organizations/ individuals making these statements if you request this. We are doing this to ensure privacy and protection of your identity throughout the interview process.

Any information shared in this interview will be used for research purposes only and will be treated with respect and confidentiality. At no point will your name or name of the review organization be shared, disclosed, or published unless otherwise specified by yourself.

The purpose of this interview today is to understand your experiences with the research license review process in Nunavut. I am interested in learning more about your unique experience with receiving and reviewing research license applications from the NRI, how feedback is provided on an application to researchers, terms and conditions on a research license, results sharing, and recommendations for future review processes in Nunavut.

There is no right or wrong answer to your responses. Please share as much as you feel comfortable with, and if at any point you feel uncomfortable or wish to withdraw, I will end the interview and delete the audio recording of it. [If they are being compensated for review], you will still be compensated for your time.

Opening questions/ understanding positionality with research and research review

1.Are/ were you involved in reviewing research license applications on behalf of [The Reviewing Organization]?.

a. How long have you been/ were you involved with the review process?

Receiving research license applications

2.Who in [The Reviewing Organization] receives license application packages from the NRI, and what procedures do they follow to get the review process started?

a. Are you the only person in your organization who reviews the applications, or do you involve other staff in the review process?

b. Does your organization request information in addition to the NRI application (i.e. Do you have your own document or approval process?)?

Reviewing research license applications

3.How many hours does it usually take for [The Reviewing Organization] to review one application?

a. Do you review all of the documents in the package as part of the review process?

i. What are those documents?

ii. [IF NOT] why do you not review all documents? (e.g., are they not reviewing certain parts because they are too long, too technical, not translated, etc.).?

4.What do you think about the information that is provided in the NRI research license application packages that you review ?

a. Can you please share your thoughts on whether or not the application provides enough information about a research project? (includes methodology, objectives, timeline, location)

b. From the application, do you think there is enough information available to evaluate the potential risks, benefits, and opportunities of the project?

c. Do you think that applications are typically complete or incomplete?

d. Do you have any thoughts on the plain language summaries (and translations) (are they easy to understand, too technical, other feedback?)?

e. Do you have any recommendations for how to improve the information that is provided in the application package?

i. Things to keep, things to change?

5.What is [The Reviewing Organization] looking for or considering when reviewing a license application?

6.Are there situations where you seek support or additional information from the NRI to complete your review of a research license application? Do you ever ask for information or assistance from any other groups (besides the NRI) to help in your review of the application?

a. What kinds of expertise are you searching for?

i. Research methods? Technical terminology or concepts? Understanding the project summary? Inuit knowledge? Subject matter expertise? Experience?

b. Does [The Reviewing Organization] share research proposals with other community members or organizations?

i. IF YES, who are you sharing with? (General public? Other organizations?)

7. Do applications ever get reviewed by [The reviewing organization] outside of standard work hours?

a. If someone is reviewing NRI license applications outside of standard work hours, do they receive compensation for their time?

[IF YES]

i. Compensation for what? Preparation? Just the board meeting? Coordinating with board members? Writing feedback? Per review? Per hour/meeting?

ii. Who provides that compensation, and is it sufficient?

iii. What are your thoughts on the amount of compensation you receive when reviewing outside of standard work hours?

[IF NO]

How do you feel about not being compensated for reviewing research license applications?

- Good? Bad? Why?

Providing feedback on research license applications to the NRI

8.Does [The Reviewing Organization] provide feedback to the NRI when you complete a review of a license application?

a. How do you typically share feedback with the NRI about a research license application?

i. Do you submit the reviewer recommendation forms you receive from the NRI?

ii. Do you send an e-mail message to the NRI to state whether your organization has completed their review and whether the application should proceed or not

b. [IF you do not communicate your review results to the NRI] why not?

Providing researchers with feedback on license applications

9.How do you know if your comments or concerns are addressed or not by the NRI? Does the NRI send to you the responses it receives from research applicants to questions and concerns you've raise in your review? Email copying? Revised terms and conditions? Amendments to licenses?

a. [IF REVISIONS OR AMENDMENTS ARE APPLIED] How are you notified of these revisions or amendments?

Research communications and relevance

Reporting

10.Does [The Reviewing Organization] receive the annual/final license reports, research results and updates for research projects licensed by the NRI?

a. [IF YES] Who sends them to you? (e.g. from the license manager at the NRI, researcher, Team Member)

i. How are they sent to you? (e.g. Email, mail, fax, website link)

Addressing community priorities

11.Do you have any recommendations for NRI about their licensing process?

a. What do you really like about the NRI review process?

b. What do you think could be improved to help [the reviewing org] complete reviews for the NRI? (Feedback? Compensation? Time to review? Number of applications? Tracking feedback?)

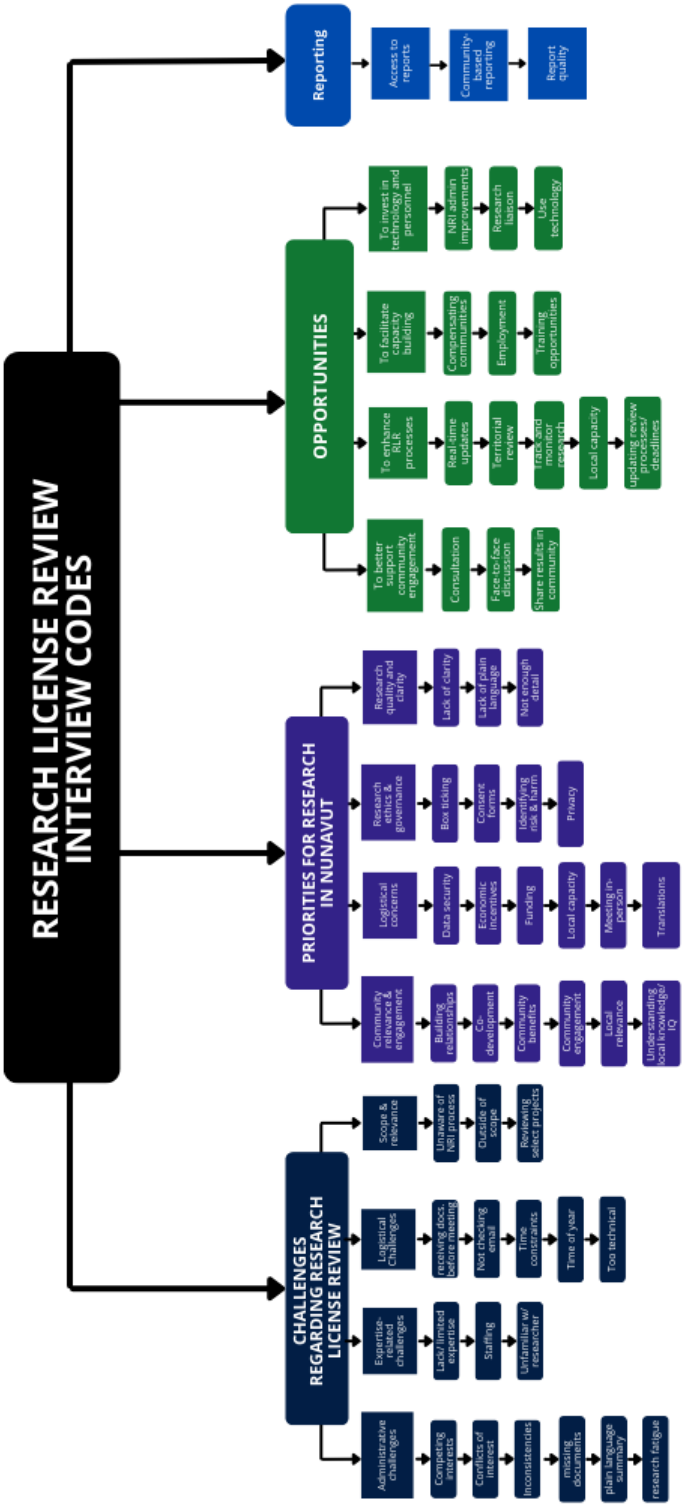
c. Do you have ideas for improving ways that community priorities can be addressed through research?

Post-Interview Question

12. We would like to recognize the valuable information that was shared [by yourself/ the reviewing organization] and your efforts related to this project. The consent form we shared with you (prior to completing the interview, along with the letter of information) outlined how you would like to be recognized in this project, and we will follow the requests you have made.

13. I want to thank you once again for your willingness to share your experiences with the research license review process in Nunavut. Your knowledge will contribute to the future management and administration of research in the territory.

Appendix 3.8: Coding framework used for Interview thematic analysis



Appendix 4.1: Workshop recruitment materials – Project overview

Making research work for Nunavummiut:

Understanding community group experiences with research license review

Do you review Nunavut Research Institute (NRI) research license applications? Would you like to help improve the review process? If so, we want to learn from you!

Project Overview

For many years we have heard community concerns related to research fatigue and the need for improved consultation and engagement of Nunavummiut in research processes.

To gain insights on community engagement in the research license review process in Nunavut, review organizations were invited to complete a survey and follow-up interview. Now, we hope to verify the results collectively.

Our goal in this work is to learn about your experiences with the research license review process, and strategies to better support community organizations involved in license review.

We invite you to participate in a workshop to verify survey and interview results on

Monday, December 9
(9am - noon)
at the Arctic Change 2024 Conference
Ottawa, ON

See next page for details.



Objectives

1. Identify the factors contributing to research fatigue and saturation in Nunavut;
2. Design new ways to track and improve the relevance and benefits of research to Nunavummiut;
3. Develop new reporting and communication tools to improve the accessibility of research results for community members, organizations, and decision-makers;
4. Develop recommendations for the respectful use of Inuit Qaujimajatuqangit in all research processes; and,
5. Create training and mentorship resources to enhance research capacity in Nunavut.

McMaster University

Carleton UNIVERSITY

Who are we inviting?

The following individuals are invited to participate in this side meeting:

- **If you are part of a group** (organization or committee) that reviews research license applications sent to you by the Nunavut Research Institute.
- **If you were previously involved** (employment, volunteer, etc) by a group (organization or committee) that reviews research licenses sent to you by the Nunavut Research Institute

What will we discuss?

- What criteria/priorities are considered when your organization reviews research license applications?
- What reporting strategies would benefit your community and how can the Nunavut Research Institute support this?
- What support do reviewers need (from licensing agencies) to facilitate a meaningful review process?
- What support do reviewers need (from researchers) to facilitate a meaningful review process?

How do I register?

If your internet connection is stable and you are comfortable completing the registration survey online in English, you can register with this LINK or with the QR code.
*Contact Alexis Beltrano (see below) to register with a fillable PDF form, or through a phone call, in English or Inuktut.

For assistance with registration, contact:

Alexis Beltrano
PhD Candidate, School of Earth, Environment, and Society, McMaster Universi
polidora@mcmaster.ca | (905) 741-2963
https://straightupnorth.ca/making-research-work-for-nunavummiut/

Jade Owen
Manager, Research Design and Policy Development
Nunavut Research Institute
Iqaluit, Nunavut
Jade.Owen@arcticcollege.ca
(867) 979-7202


Photo: Gita Ljubicic

Gita Ljubicic
Supervisor of Alexis Beltrano
Associate Professor
McMaster University
Hamilton, Ontario
gita.ljubicic@mcmaser.ca
(289) 659-2074

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NSTP PFSN

Appendix 4.2: Workshop recruitment materials – Letter of information

Letter of Information

Project Title

Making research work for Nunavummiut:
Understanding community group experiences with research license review

What is this project about?

For many years we have heard community concerns related to research fatigue and the need for improved consultation and engagement of Nunavummiut in research processes. Some of these concerns have focused specifically on the process of review, evaluation, and approval, of research licensed by the Nunavut Research Institute (NRI).

This project was developed to learn about community group experiences with the research license review process, and what can be improved. We are hosting a workshop at Arctic Change 2024 in Ottawa, to get input from review committees across Nunavut. As part of your role (or previous role) at a research license review organization, the Nunavut Research Institute invites you to join this side meeting. Our goal in this work is to improve Nunavut Research Institute operations and better support organizations involved in license review.

What is this workshop about?

- What criteria/priorities are considered when your organization reviews research license applications?
- What reporting strategies would benefit your community and how can the Nunavut Research Institute support this?
- What support do reviewers need (from licensing agencies) to facilitate a meaningful review process?
- What support do reviewers need (from researchers) to facilitate a meaningful review process?



Who is involved in this project?

This project is co-led by researchers at the Nunavut Research Institute and McMaster University. This work is a part of a broader project focused on "Making research work for Nunavummiut", supported through close collaboration with Qaujigiartiit Health Research Centre, Nunavut Tunngavik Incorporated, the Arviat Aqqiumavvik Society, and Carleton University. **Alexis Beltrano (PhD Candidate at McMaster University) is leading this interview portion of the project.** Our main research funding comes from the Social Science and Humanities Research Council of Canada.

Letter of Information

How long will the workshop take?

The workshop will run for about three hours. However, if you are only available for a specific time, we can modify accordingly.

Who can participate in the workshop?

The following individuals are invited to participate in this workshop:

- **If you are part of a group** (organization or committee) that reviews research license applications sent to you by the Nunavut Research Institute.
- **If you were previously involved** (employment, volunteer, etc) by a group (organization or committee) that reviews research licenses sent to you by the Nunavut Research Institute


Photo: Alison Perrin

How to register for the workshop?

If your internet connection is stable and you are comfortable completing the registration survey online in English, **you can register with this link:** https://carletonu.az1.qualtrics.com/jfe/form/SV_1Zf2RXP5J3Dmep0

Other options for completing the questions in English or Inuktut include:

- A PDF form that you can fill in digitally and submit by email
- A phone call to go through questions orally

To receive support with the online registration, to request the PDF form, or to schedule a time to complete the registration by phone, **contact Alexis Beltrano (see Project Contacts below).** If you would like an interpreter for the phone survey, you can select an interpreter in your community and the costs will be covered by the project.

Letter of Information



What are the benefits?

Your feedback will help to improve the research licensing review process, Nunavut Research Institute operations, and community research consultation and engagement.

Are there any risks?

While there are no major risks associated with the side workshop, some questions about research license review may lead to uncomfortable discussions at times or raise memories of difficult experiences with research. You can choose to participate (or not), and you can leave the workshop at any time. Audio recordings of plenary, photographs, and notes will be taken of group discussions. During registration you can choose how/if you would like to be identified and recorded (or not).

Reciprocity

Participating in this workshop is voluntary and there is no direct compensation, however if you require assistance with travel and accommodations we may support you . In reciprocity, we have provided your organization a digital and hard copy of the Nunavut-wide and community-specific research trends reports (if you have not yet received these, contact Alexis Beltrano).

Who will know what I said?

Audio recordings, photographs, and notes from the meeting will be used to summarize discussions according to common themes. Key points and workshop photos will be made publicly available in reports, publications, briefing notes, presentations, and social media, which can be accessed at the StraightUpNorth website. At no point will your name [or name of the review organization] be shared, disclosed, or published unless otherwise specified by yourself. All members of the research team (including Jamal Shirley and Jade Owen of the NRI), and translators (if interpretation service is required) will have access to workshop notes and transcripts, however, only, McMaster researchers (Ljubicic, Carter, Beltrano) will have access to contact information. Long term storage, access, and future uses of workshop discussions will be used for research purposes and results sharing only, as determined by the Nunavut Research Institute.

What if I change my mind about being involved?

Your participation in this workshop is voluntary. You can choose to be involved in the project based on your comfort level. You can also choose to stop or withdraw from the meeting at any time.
If you decide to withdraw, there will be no consequences. You have 2 months from the workshop in case of withdrawal, anything you have shared will be destroyed unless indicated otherwise. Selections of recordings and transcripts can be removed at your request.

Your decision to participate (or not) **WILL NOT impact your continued access to support from the NRI, in any way.**

Letter of Information

How are you protecting my privacy?

Recordings, and transcripts will be stored and encrypted on password-protected computers of the researchers involved. Long term storage, access, and future uses will be used for research purposes and results sharing only, and will be treated with respect and confidentiality.



Research ethics

This project has been reviewed by the McMaster University Research Ethics Board and received ethics clearance (protocol #6602). If you have concerns or questions about your rights as a participant or about the way the project is conducted, contact:

McMaster Research Ethics Secretariat
c/o Research Office for Administrative Development and Support
Telephone: (905) 525-9140 ext. 23142
E-mail: ethicsoffice@mcmaster.ca

Project Contacts

Jade Owen
Manager, Research Design and Policy Development
Nunavut Research Institute
Iqaluit, Nunavut
Jade.Owen@arcticcollege.ca
(867) 979-7202

Alexis Beltrano
PhD Candidate, School of Earth, Environment, and Society
McMaster University
Hamilton, Ontario
polidora@mcmaster.ca
(905) 741-2963

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SSHRC CRSH

CANADA RESEARCH CHAIRS / CHAIRES DE RECHERCHE DU CANADA

NSTP PFSN

Appendix 4.3: Workshop recruitment materials – Initial email for workshop

Good Morning,

My name is Alexis Beltrano and I am a PhD candidate at McMaster University. We have previously connected (formerly Alexis Polidoro) as part of a project called "**Making research work for Nunavummiut**", that I am working on with the Nunavut Research Institute (NRI).

You have received project details and an invitation to complete a survey in December 2022, and recently been requested to participate in an interview. Whether or not you completed the survey or interview, **we invite you to participate in a workshop we are organizing to bring together research review organizations across Nunavut**.

This workshop will take place at the **Arctic Change Conference** **in Ottawa, Ontario, on Monday morning, December 9, 2024**. Please see the attached overview for meeting details.

You can register to attend the workshop using this link: ***https://carletonu.az1.qualtrics.com/jfe/form/SV_1Zf2RXP5J3Dmep0***.

There is limited funding available to cover the travel and accommodation costs for representatives of Hamlet Councils and Hunters and Trappers Organizations to attend the meeting and the entire Arctic Change conference (if interested). If you require funds to attend the conference, you can request this in the registration process.

You are recognized as playing a critical role in the research license review process in Nunavut. We hope you can designate a representative to attend our workshop. You will have opportunities to share your experiences and discuss how reviewers, researchers, and the NRI can work together to achieve a more meaningful research license review process in Nunavut. The information we gather will help the NRI to improve support and coordination for organizations involved in license review and will also be included in my thesis research.

If you have questions regarding funding, logistics, or registration, please contact me (Alexis) via email or phone (905-741-2963).

Thank you, and we look forward to hearing from you.

Regards,

Alexis

Appendix 4.4: Workshop materials – Agenda and outline

9:00-9:30 AM - Opening and Overview (30 minutes)

- Welcome participants and provide an overview of preliminary results for the research (surveys, interviews)
- NRI introductions, state absence from the session but returning at the end for a Q&A
    - Let it be known that they (NRI) will not know who said what
- Briefly introduce the World Cafe format and explain the flow of the session and objectives.
    - What do you want people to focus on?
    - Speaking mind and heart
    - Listening and understand
    - Linking and connecting ideas (thinking deeply)
- Highlight the importance of discussing the proposed questions.

9:30-10:00 AM - Round 1 of Table Discussions (30 minutes)

- All four questions will be facilitated at each time
- Table one --> Q1
- Table two -> Q2
- Table three--> Q3
- Table four --> Q4
    - **NUMBER OF TABLES/ FACILITATORS DEPENDENT ON NUMBER OF GUESTS**

10:00-10:30 AM – BREAK (30 MINS)

10:30-10:55 AM - Round 2 - Table Discussions (20 minutes)

- All four questions will be facilitated at each time
- Table one --> Q2
- Table two -> Q3
- Table three--> Q4
- Table four --> Q1

NUMBER OF TABLES/ FACILITATORS DEPENDENT ON NUMBER OF GUESTS

10:55-11:15 AM Round 3 - Table Discussions (20 minutes)

- All four questions will be facilitated at each time

- Table one --> Q3
- Table two -> Q4
- Table three--> Q1
- Table four --> Q2
    - **NUMBER OF TABLES/ FACILITATORS DEPENDENT ON NUMBER OF GUESTS**

11:15-11:45 - Large group discussion (30 minutes)

11:45-12:00 - Wrap-Up and Next Steps (1 minutes)

Appendix 4.5: Workshop analysis – Codebook used for thematic analysis

