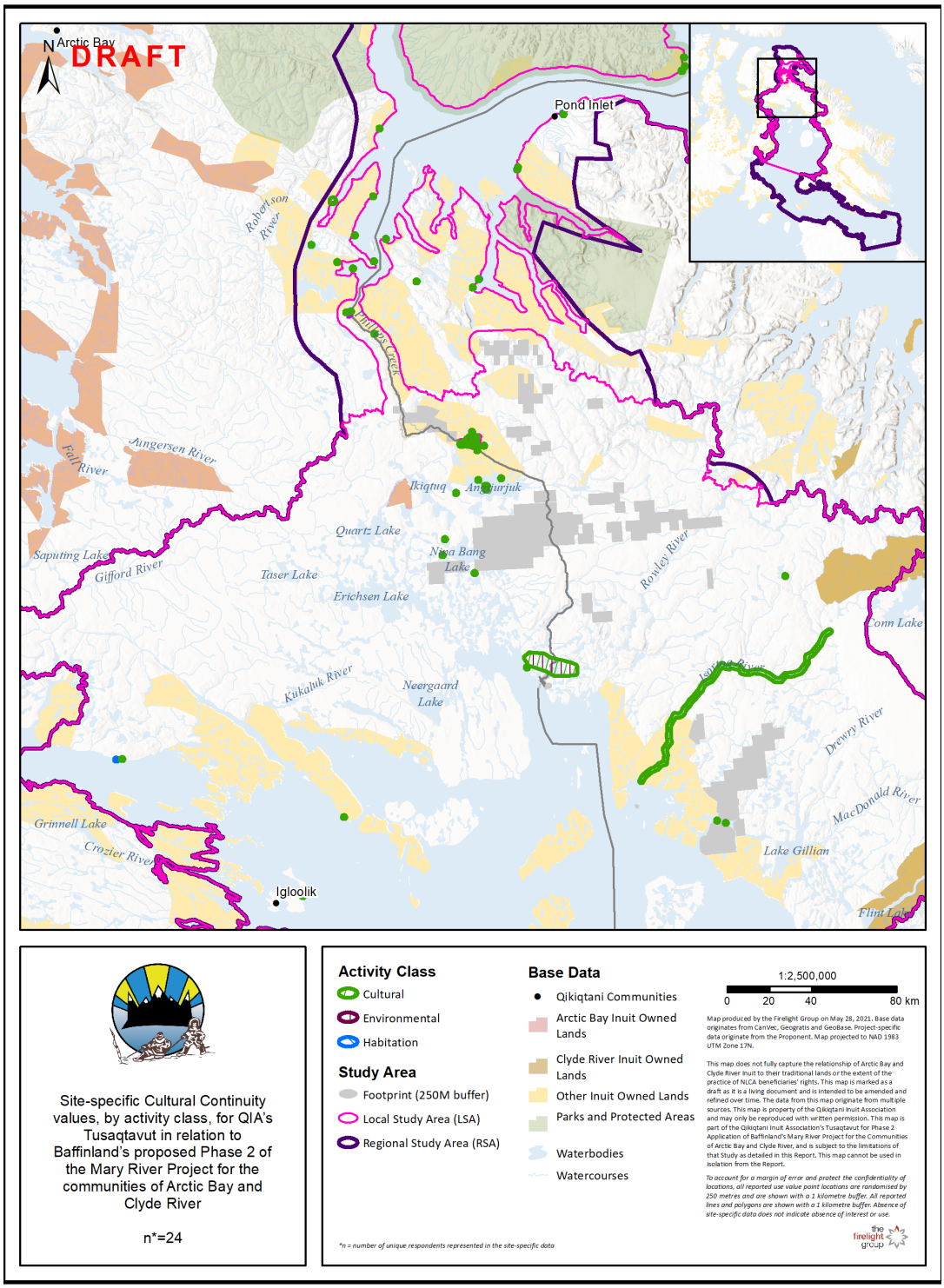

Figure 11: Arctic Bay and Clyde River site-specific Cultural Continuity values reported in the Study Area

4.6.2 Importance

The following sections (Section 4.6.2 - 4.6.4) discuss the importance, impacted baseline, and potential Project interactions with the Valued Component of Cultural Continuity. This draws primarily from the qualitative data collected during semi-structured interviews. For Study participants from both Arctic Bay and Clyde River, cultural continuity was about their ability to practice important elements of Inuit culture, including practices like carving and crafts, their connection to their ancestors and history through archaeological heritage and landmarks, the enjoyment of gathering on the land and the place-based knowledge that was transmitted orally, and the ability to learn and teach Inuit values, knowledge and Inuit Qaujimajatuqangit.

A range of practices are important to Inuit cultural continuity. Subsistence activities and time spent on the land in their pursuit play a central role in Inuit culture and this role is largely discussed in Sections 4.2 to 4.5 of this report. Alongside subsistence activities, Inuit developed a rich tradition of carving and crafts, and across Baffin Island have left scores of archaeological sites and remains, treasured to this day by the descendants of those who built the Inuksuks, tent rings and sod house pits. Transmitting culture and Inuit Qaujimajatuqangit and knowledge through stores and travel as well as experiential learning is also an important component of Inuit cultural continuity.

Collecting soapstone close to Mary River has been an important tradition for North Baffin Inuit. In the quotes below, participants describe the importance of this source of soapstone and the journeys they would make to gather it.

> *... his family members and community members used that area [around the Project] a lot before Mary River was established. It was the main area where the community would go harvest, or mine soapstone.* (C13 2020, interpreted from Inuktitut)

> *My father in-law … used to travel in through that, get some soapstone for carving and hunt caribou in that area in Mary River. Yeah, right from Mary River hills … they were just going after the soapstone that – in … Those hills where they working in them now, where they're collecting all the iron ore right now.* (C18 2020)

> *She learned about that through stories [of Mary River area] because the community members here would go soapstone mining through that area. So, she knew about it through hunters coming back – going in back and forth to get soapstone.* (C10 2020, interpreted from Inuktitut)

Carving stone from Mary River was described by participants as being preferred for its softness and other visual qualities. Participants also described it as an important source of stone, there being few other sources.

> *Yeah. Right there on the top [of the mountain at the Mary River mine site]. … Yeah, there used to be a lot of soapstone there. … [He mined soapstone] By himself, by snowmobile. … [In] 1979. ... deep into the mountain is all soapstone. ... [He used the soapstone for] carving to sell. ... Because there*

> *was no readily available soapstone near Clyde River, so they had to go all the way up there, or he had to go all the way up there. ... He was going up there because you, you have to … generate economic through carving. ... It was a very soft soapstone and they had black specks ... There's still lots up there.* (C15 2020a, interpreted from Inuktitut)

> *Yeah, … but they – that haven't found anything near Clyde River that can be like softer soapstone. So, that's the – I think that's the closest space [Mary River area] that we can get soapstones from.* (C26 2020)

> *He actually went up there [to Mary River mine site] in the wintertime by … to go soapstone mining. … the soapstone was unique, it was like blueish with like the sparkly diamond-looking – different … And they were soft.* (C05 2020a, interpreted from Inuktitut)

Soapstone has been used and collected from the Mary River area for decades by Inuit from around the North Baffin area. In the quotes below, participants describe collection occurring since the 1970s by Inuit from Pond Inlet, Clyde River, Igloolik and Sanirajak.

> *… like back in 86, 87 there, 86 like in Mary River I went there to pick up soapstone … Yeah but there were a lot of people there from Igoolik, Hall Beach.* (C19 2020)

> *1975, his first time going to quarry from Pond Inlet, with people from Pond Inlet … [For] Carving purposes, to sell, is why he, he quarried.* (C21 2020, interpreted from Inuktitut)

> *So starting in 1970, at Mary River area ... people from Clyde and [inaudible] would quarry, go quarry soap stone at the actual, in the mine area. …* (C01 2020, interpreted from Inuktitut)

Carving played an important role in the incomes of many Inuit. In the quote below, one participant describes how while markets for carving have fluctuated, they have been an important source of income.

> *… They used that trail in 1977 to go soapstone mining. ... February to March. That was a one-month trip. ... when he was young he learned this trail very early age because he had an aunt in Pond Inlet that they would visit. ... he got familiar with the land the more he travelled. ... back in the day when the market was good, carving … was a major, major source of income.* (C05 2020a, interpreted from Inuktitut)

Inuit would also travel to the Mary River area to collect other materials. In the quote below, one participant describes Inuit from Clyde River travelling past Mary River to the Milne Inlet area to collect whale bones for use in carving and tools.

> *So, the reason people from Clyde will go up there to quarry soapstone and whale bone is because around here it was, it became scarce, so they went further up. … So, they got caught with the whale bone on their sled by the people of Pond Inlet and were told, 'don't collect whale bone,' and they said,*

> *'it's our last time. We promise.' [laughs]. … Because they belonged to the people of Pond Inlet [laughs].* (C25 2020, interpreted from Inuktitut)

The history of Inuit occupation of North Baffin remains evident in the abundance of Inuksuks and other landmarks across the region. In the quotes below, participants describe this physical heritage and the impact that seeing these places continues to have on them, inspiring awe and providing indicators of good hunting.

> *We call it Inutsuit. … Yeah, long time ago … they used to make very large inuksuk. There's very big huge inuksuk's up there. [Interpreter:] [Place name means] Place of inuksuk's. There's massive inuksuk's up there. Possibly from our previous ancestors of [inaudible]. They're so big that it – there was – it looks like they were set by giants. ...* (C14 2020, partially interpreted from Inuktitut)

> *Because in most of those little lakes … they used to hunt caribou and they lure – managed to try and get the caribou to the water. They made so many inuksuk's. ... Yeah, and most of them – inuksuk's, they're all kinds of forms of inuksuk's. They're like a stop sign or you can read inuksuk. You can read. Yeah. They're shaped – how they – how they're put together, you can read it.* (C14 2020)

> *Landmarks, pointers, rocks piled up anywhere, because this general area was really good for caribou. Even if there's no caribou anywhere, they would go to this side*. (A07 2020)

> *And I recently heard that there's tents – what do you call it? ... Tent rings … So, there's quite a bit of history in that area [Sam Ford Fjord].* (C04 2020)

The rich and complex body of knowledge required to survive and thrive in an Arctic environment is important for Inuit to learn and to teach to future generations and each other. Participants described knowledge transmission as a complex process combining different learning and teaching styles for different types or bodies of knowledge.

Experiential learning is an important tradition of Inuit teaching and learning. Bringing young Inuit out on the land was described by participants as being important for teaching, establishing a pattern of mentorship and learning-by-doing which was necessary to learn many, often hunting, related tasks. The variety of conditions potentially encountered while harvesting and the problem-solving skills required to survive were generally described by participants as being knowledge which could not be transmitted without direct experience.

> *Yeah, her father taught her [to hunt seals]. Yeah, because he would teach like pretty much the whole family, so her dad taught her how to catch a fish.* (A11 2020, interpreted from Inuktitut)

> *Oh yeah, he assisted a hunter … [personal name] caught a narwal – he was helping him … they processed the meat at the – at the floe edge … So [personal name] was also teaching him how to – ah, like how it is to hunt a*

> *narwhal … he shot it and they both processed it*. (A19 2020, interpreted from Inuktitut)

> *[Interviewer:] Who taught you how to hunt and trap, and where? [C04:] Mainly my father. Started – well he started – I started quite young with my father. Was mostly in the summertime and spring. Late spring – springtime when it was warmer. It was mainly seals. He started teaching me with seals. How to hunt seals different times of the year. I gradually – getting the knowledge of different time of the season, how to hunt them, which one to harvest, which one is the best to harvest, and that kind of stuff.* (C04 2020)

Participants described their experiential learning, in the quotes below, as often happening with parents, grandparents and older relations.

> *Of course. He's learned a lot of skills from his grandpa … when he was only 4 years old. He would accompany him. I mean take him with him.* (A17 2020, interpreted from Inuktitut)

> *My parents taught me. They actually lived there before. So, that whole area was my father's homeland. So, he taught me pretty much everything …* (A15 2020)

> *Yes it's very important for younger to learn and to hunt because it's our way of life. That's how our ancestors survived … It was the country food that they harvested, and I tried to give the – my knowledge to my children as my dad did, and uncles, my brothers, my relatives that matter.* (C04 2020)

Learning about local conditions through interaction and meeting with other Inuit from different areas was described by one participant as being an important Inuit tradition.

> *So, back in the day … they're nomadic. So in between all the travels, when people meet together, they tell stories of where they go, hunting grounds and what areas have fish … So, through interaction with other hunters, is how he learned about the area. Because say, you go visiting to a different community, your conversations are going to be about hunting and your hunting grounds and – certain areas where you can harvest fish, or caribou onto each community … So, through interaction with other hunters and through stories, is when he learned about it.* (A05 2020, interpreted from Inuktitut)

Inuit culture is traditionally oral, with written syllabics a colonially introduced technology. Learning by hearing stories was described by participants as remaining a vital way to learn and pass on knowledge.

> *She learned about that area from hunters telling stories about the locations where they would go for hunting.* (C10 2020, interpreted from Inuktitut)

> *[Interviewer:] How did you learn about this area? [C04:] I got families up there. So they tell stories. And I see quite a bit of posts on Facebook. My late father had an older brother up there that lived up in Pond Inlet. They used to*

> *talk a lot about their hunting trips, and their experiences, and whatnot. I think that's where I got the information and the knowledge.* (C04 2020)

As with knowledge about hunting, participants described the best way to learn about trails and paths as travelling. In the quotes below, participants describe how experience travelling taught them how to navigate as well as the important characteristics and uses of different areas.

> *It was like a learning lesson, when they were coming – I ended on that lake in Tugaat where they harvested caribou. But it was also a learning experience for him, because on their way to the lake here and where they harvested tuktu [caribou] they went back in different ways. Also he showed him that there was a trail from this if you were to come up here from this way. So within those two years, his step father taught him different ways to get around.* (A02 2020, interpreted from Inuktitut)

> *His family members also used that area and that was how he learned it and that was the caribou grounds.* (A15 2020, interpreted from Inuktitut)

> *He is with his son, 14 year old. He's training him now how – where to go, what to hunt for in what areas*. (A18 2020, interpreted from Inuktitut)

Inherent in the patterns of learning and knowledge transmission described above is cultural transmission. Participants frequently described seeing themselves as part of a procession of generations – participating in culture, as described by one participant below, necessarily connected to passing it on to others.

> *They lived off the land up here for all his life and their ancestors, passing it down to us and we're passing that down – continuing to pass down our knowledge and our way of life to the youth and next generations to come. That's why it's so important to protect the environment and the land.* (C05 2020b, interpreted from Inuktitut)

Inuit have traditionally gathered on the land in order to share food and stories, and to meet friends and family and take part in hunts or resource gathering. This pattern of gathering on the land was an important part of pre-settlement life but it continues to feature in the lives of Inuit today who travel on the land and gather at family camps and outposts throughout the year (discussed in Section 4.5). In the quotes below, participants describe this pattern of gathering and its importance to Inuit culture from social and subsistence perspectives.

> *There was a – like that area where she's pointing was a kind of a gathering place as well. … So, people from Pond Inlet and Clyde [River] go caribou hunting and fishing there and that's why they would occasionally meet up in that area [Coutts Inlet].* (C25 2020, interpreted from Inuktitut)

> *And then, traditionally, people from Igloolik and Arctic Bay and Pond Inlet used to walk and gather … inland and they would gather there together … Yeah, the three communities would meet in this big lake to harvest caribou …*

> *there's a lot of Inuksuks and landmarks that are indicating some areas where they used to go. (*A12 2020, interpreted from Inuktitut)

Inuit Qaujimajatuqangit includes both culturally accreted knowledge of the land and animals but also important values and normative behaviours which Inuit have developed in order to better live in harmony with each other and with the land.

Participants described important patterns of thought or value in the quotes below, including the ability to work together, to care for equipment and clothing, to teach future generations, and to practice stewardship of their environment.

> *It's really important to teach his grandson because that's the only way now because he's the only one left in his family so he feels it's important to teach his grandson these skills.* (A17 2020, interpreted from Inuktitut)

> *It's important for the younger generation to continue practicing because women like to get their sealskin that they clean and prepare so that they can make boots and other clothing. So to keep the tradition going, it's very important for the younger generation to be able to [sew] … Because women are the stewardships of the garments that they make. So it's sacred to them that they keep continuing their practice. Of course the men has to help too because they have to go out and catch animals so it's a partnership between them*. (A03 2020, interpreted from Inuktitut)

> *Yes, they dragged all the houses from across here to there ... Back then, there was a really important teaching of to be good stewards – good stewards of the environment and that's what they tried to practice as much as possible. So, she's just establishing that, because that's why they kind of moved around to different fresh places or to other traditional places.* (C12 2020, interpreted from Inuktitut)

Knowledge of the land was described by many participants as a central part of Inuit culture. In the quotes below, Inuit describe aspects of this knowledge, particularly important in their pre-settlement, nomadic pattern of life.

> *For that reason, Inuit are very knowledgeable of the land because they kept moving every two years to different spots and they would never stay in one spot and that's why they covered so much land throughout whole Baffin Island and throughout whole of Nunavut actually. Even to Nunavik area ...* (C23 2020, interpreted from Inuktitut)

> *... we [the family] would travel here and there, [unspecified] and north of Clyde [River[, and south of Clyde [River] and so on, we were nomadic, we lived nomadic life.* (C11 2020)

> *So he used that area so often for many years because when your life depends on food survival on the land you learn pretty quick where to go even though you've never been there, so when he's talking about all the areas he*

> *could like visualize exactly where everything is and what it looks like.* (A09 2020, interpreted from Inuktitut)

Inuit knowledge of animals has been described, in relation to subsistence harvesting, elsewhere in this report (see Sections 4.2 – 4.4). Alongside this technical knowledge of how to most efficiently gather their subsistence harvest, Inuit have also evolved a complex pattern of thought and behaviour, engrained in Inuit Qaujimajatuqangit, which involves respecting animals in order to ensure their continuity. Participant quotes below describe some of the normative behaviours and customs which ensure successful harvests and good human-animal relations.

> *And wildlife seem to prefer to be hunted, like they just, you know, it's a cycle. … Because in some traditional homesteads that that used to be there – there used to be like wildlife around, but now that there's no people because animals give, give themselves up as well to be harvested that they don't seem to be around as much because they follow people too.* (C25 2020, interpreted from Inuktitut)

> *Oh, I see, yeah, because there was a law that when hunters butchered caribou, they had to butcher it near a river or a lake, and not leave any blood or any of the guts on the land, because animals smell it and they might not be attracted to it, so they would leave whatever remains in the river, or very close to a lake.* (C21 2020, interpreted from Inuktitut)

> *If I speak of the bear wrongfully, it could come back and haunt me in the future.* (A07 2020)

> *As a boy you know … one thing that was told was don't ever play with any animal or bug or anything like that, don't just take the life as granted to not do that, doing these things is putting on a bad luck in your life. Well in a way … I'm kind to you, yes, I should be kind to animals also, it should be in your system ... We were told not – if you're not going to eat that animal, leave it alone. If you're going to take it, or keep it as a dog food, take it. And for heating oil, yes, take it. If you can.* (C11 2020)

Placenames are connected to legends, land uses, homes, and personal or family histories or travelling. In the quotes below participants describe the origins of some of the placenames of North Baffin.

> *That place name is Qakkiaq … that's where they moved in 1947 and then that's the area where they hunting narwhals. And it's still used today by him and his grandchildren to harvest narwhals there.* (A02 2020, interpreted from Inuktitut)

> *Qaqqalik … Place of a hill … it's a place of little people … natural home for little people.* (A13 2020, interpreted from Inuktitut)

> *They had a house here, and it was their wintering grounds. They only used it for winter and spring, and then they would move … They didn't really stay in*

> *one area too long … Yeah, that place name is … Upingivik.* (A12 2020, interpreted from Inuktitut)

> *Avatuu … Yeah … that place name originated from the elders … it seems to be an important landmark to start travelling north from here, or up. (C13 2020, interpreted from Inuktitut)*

Placenames may also represent natural features considered significant to life. In the quotes below, participants provide examples of resource or landmark-based placenames.

> *Imiq. That place name … for that one is Imiq, meaning water.* (A12 2020, interpreted from Inuktitut)

> *Yeah he was born in a sod house because it was winter time … Qurluniq … It's like a big strong falls and that's why it's called [inaudible 00:08:17].* (A17 2020, interpreted from Inuktitut)

> *This was a calving ground for caribous. When they give birth the placenta comes out throughout this area and from the reflection from the sun and the placentas that were left behind, it has a shine from all the placentas that were left behind by caribou's giving the birth. That's the meaning of Qilituq because when the sun is shining it's reflecting from the placenta material I guess, yeah.* (A09 2020, interpreted from Inuktitut)

Inuit cultural continuity was described by participants as revolving around the ability to transmit the rich body of knowledge Inuit have developed to understand their world and survive within it. Crafts like carving, important patterns of thought and behaviour, and knowledge of the land reflected in placenames are all evidence of an Inuit culture which remains intimately connected to ancestral knowledge and traditions.

4.6.3 Impacted Baseline

Inuit participants described a variety of factors which were already shaping changes in their communities. Changes in access to culturally important materials and activities, as well as a range of social changes were felt by participants to be reshaping community life and the practice and continuity of Inuit culture. Project impacts on Inuit cultural continuity should be considered as taking place against the backdrop of this already impacted baseline.

Existing mining activity at the Project was seen by one participant as already having interrupted the pattern of soapstone collection in the Study Area, reducing access in Clyde River to the materials important for carving both as an opportunity to earn income and to practice a traditional artform.

> *So, he knows historically that his people from Clyde [River] have gone to Baffinland area for soapstone mining. ... He can't point to the mine – or to the area where the soapstone is mined because he's never been there, but he knows for a fact that people here have used it in the past to go from here through the land to Mary River to go soapstone mining. ... They're not being*

> *– they're not using that spot for soapstone mining anymore since the mine started.* (C02 2020, interpreted from Inuktitut)

Social changes within communities were remarked on by participants, who felt that community life was altering Inuit life and culture, as one participant explains below.

> *According to her knowledge, she hasn't really seen a lot of environmental change but more of a social impact of how her life is changing in a way. You know, living in communities, having access to this and that and the other thing. So she was more looking at that as Inuit life way of changing. And the environment, according to her, didn't change too, too much.* (A03 2020, interpreted from Inuktitut)

One of the prominent social changes being experienced by participants was an increase in the access to drugs and alcohol within communities. In the quotes below, one participant describes how they felt access to both alcohol and drugs in Clyde River had increased.

> *I don't really try, try and track it down. Whether it [increased alcohol use in Clyde River] stems from there [the Project], but if it had – it has increased dramatically. …* (C26 2020)

> *She's more concerned about the social impacts such as drug use by Inuit that may have – because you know, drugs come from the south. So she's more concerned about the social impacts of availability of illegal substances … It's not necessarily associated with the increased disposable income but just changes of life. Because it just used to be alcohol availability and, you know, people would just drink till they pass out but then now it seems like, with the combination of the two, that could just becoming more and more of a concern.* (A03 2020, interpreted from Inuktitut)

The transmission of knowledge and cultural values to younger generations was seen by participants as changing. In the quotes below, participants described how they felt younger generations of Inuit were not fully absorbing traditional teachings but also that they were increasingly obliged to choose between traditional life and subsistence harvesting and wage employment.

> *Yeah, on a general note another concern is that the younger generation don't, don't have the same traditional knowledge of conservation and only taking what you need. Some younger generations are just shooting for the sake of killing an animal and not, not using the entire animals and wasting. So, she's concerned about that as well. So, the traditional teachings are being lost on top of the project being there, so it could be a double whammy as well for the wildlife, yeah.* (C25 2020, interpreted from Inuktitut)

> *Yeah, he's taught them [participant's children] hunting skills, but then again, there's always a conflict because – not conflict, but they also have to go to school, so he can't really do it all. But he's got some skilled hunters in his family … It's important because they really end up enjoying the activity of*

> *hunting, and then at the same time, since they've gone to formal school, they can have jobs at the same time. So, it's a good balance for them to be able to be in the wage economy …* (A14 2020, interpreted from Inuktitut)

Social changes and impacts to cultural transmission were described by participants as having repercussions on the continuity of Inuit knowledge and Inuit Qaujimajatuqangit. In the quotes below, participants described how physical changes to the land, like seeing increasing amounts of litter or refuse, also act to disrupt these traditional knowledges by shifting Inuit understandings and customs of stewardship and respect for the land.

> *You have this vibe in Mother Nature up here. If you're not listening to the Mother Nature, you're pretty much a dead person. And then everyone you try and provide to is pretty much dead. So having railways, even ships going too many times in the year, it's going to affect our way of living and it has already, because we've had things that are thrown in our water to survey whatever it might be.* (C06 2020)

> *... we're using the earth all the time, and what we can get from the earth to uplift what the living is, you know that's one of the concerns, but for many of us, we hunt. This is where we get our food, like I don't – it's hard for me to see some garbage out on the land, it's not right. You pick up your garbage and bring it home to the dump. That's what we do*. (C11 2020)

Participants described a range of factors impacting their cultural continuity prior to the proposed Phase 2 Expansion. Existing mine operations and social and cultural changes within communities were felt by participants to already be impacting Inuit cultural continuity.

4.6.4 Project Interactions

Participants from Arctic Bay and Clyde River saw a range of Project interactions potentially impacting their Cultural Continuity. Project Interactions related to impacts on tangible aspects of culture like archaeological heritage but also important and intangible elements like knowledge transmission and Inuit Qaujimajatuqangit. Cultural practices like carving or hunting were seen as being potentially impacted by changes to the land and animals.

Disruptions to physical heritage was a concern raised by one participant who felt that Project activities were disturbing archaeological materials, as they explain below.

> *His son he works at the Mary River Mine and there's a lot of artefacts that are here that Baffinland claim didn't exist and they're being disturbed and destroyed … All the remaining like tent rings and saw houses and all the artefacts that are underground …* (A10 2020, interpreted from Inuktitut)

> *He's saying that Baffinland is like, they said that they're sneaky because they claimed this area didn't have any artefacts and then the artefacts are being destroyed here along with, when they go patrolling here because he's part of*

> *the Rangers, and Baffinland's not keeping any regulations in regards to the airlines that are flying. When they're in that area a Baffinland plane flew so close to them that it frightened them that they were so low and passed it by. It was so loud that [inaudible] blast like hurt their hearing*. (A10 2020, interpreted from Inuktitut)

Aside from physical disruptions to culture, as described above, participants also described Project impacts on intangible facets of culture. In the quotes below, participants described how they see the Project as disrupting the harmony of their communities, particularly the harmony with which Inuit live with their environment, also known as "sense of place".

> *He knows that the impact will be just before the pinnacle, or close to it, the ships are going to be really close to Pond Inlet. There'll be no more harmony with nature for the people that live in that area. And because Inuit traditionally like to live in harmony, that's how we have been, but with this – the constant activity that's going on, people will not be settled down as they used to be. So, that's how he sees that how it might play out.* (C15 2020b, interpreted from Inuktitut)

> *All she really wants is people to be able to work in harmony – like Inuit, non-Inuit – and just work together towards a common goal. That is what she is wishing for the future. So even with the project – like she's not against it but she wants people to work together in harmony and she thinks that's going to benefit both Inuit and non-Inuit.* (A03 2020, interpreted from Inuktitut)

The Project was described by participants as removing or severing a link between Inuit and their land, leading to a sense of displacement and tension and with serious implications for what Inuit consider to be their cultural tradition or role, of environmental stewardship.

> *So, if they slow down and take their time and recognize that … Inuit knowledge and put those practices into the operations and Inuit be part of the monitoring programs or a part of monitoring the activities and then that would create less tension and be able to work together better*. (A12 2020, interpreted from Inuktitut)

> *She does not support Phase Two, if Phase Two ever was approved it would be very devastating because we don't own the earth, we don't own the environment, we're just borrowing it. And it would be a sad day if that project was ever approved. So she is a huge – having grown up with parents or a father that was very much an environmental steward that she just wants to continue that. And that is not – being environmentally responsible.* (C12 2020, interpreted from Inuktitut)

> *So, he says the – for economic opportunities for Inuit, it could be beneficial if you – especially when you start a new family, but the social impacts of readily available income could also have sort of a negative impact as well; but, but the environment because Inuit are not animal rights activists by any means*

> *but Inuit are good stewards of animals and wildlife. So, that is going to be impacted as well. They were trying to be good stewards, but it's not happening because of the impact.* (C24 2020, interpreted from Inuktitut)

Experiences with alcohol consumption as a result of changes in people's lives and potentially increased income and increased stress were described by one participant who felt that there was a direct link between the Project and an increase in alcohol abuse in the home communities of employees.

> *But when you're not a drinker and you haven't experienced anything like that in the past, it's scary. … because it's my house, but I'm getting out of my house in order to avoid that; and I think a lot of families are doing that now. And we don't have any shelters here to go to. So, these are the concerns I had over alcohol. ... it's scary when you're not used to it. … Like when we haven't, like I've never experienced that growing up. … every time I smell somebody with alcohol I start freaking out because when I talk to people when they were drink – drunk the previous day and then I would talk to them the next day they would say they didn't know. They didn't know what they were doing. They don't know that it happened … So, the more I think of it, if I smell somebody who smells like alcohol then I'm freaking out. I can't do anything at home. So, there's just concerns that I have. So, I think that people who are starting employment with Mary River should be trained more, or get more educated on alcohol, how it affects the family, the community, the things that would be happening.* (C26 2020)

Playing out against a backdrop of social change within communities, participants saw Project Interactions having a broadly negative impact on cultural continuity. Participants were particularly concerned about project impacts on physical heritage, but were also deeply concerned about the potential impacts of the proposed Phase 2 Expansion on their cultural values. Stewardship and a pattern of subsistence which emphasizes a harmonious existence in and with the landscape are important elements of the Inuit body of understanding termed Inuit Qaujimajatuqangit – a pattern of thought and understanding which participants felt was directly threatened by the scale of intervention called for during Phase 2.

In summary, Arctic Bay and Clyde River participants anticipate the following potential interactions between the Project and their Cultural Continuity values:

- Disruptions to physical heritage sites including archaeological evidence, through Project construction and operation;
- Disruptions to "sense of place" through decreased ability of Inuit to connect with nature and spend time in places that are culturally and spiritually meaningful, due to Project activities;
- Disconnection from culture due to the above disruptions; and
- Psychosocial impacts such as increased substance abuse due to the above disconnection and disruptions.

4.7 FOOD SOVEREIGNTY

This section (Section 4.7) discusses the importance, impacted baseline, and potential Project interactions with the Inuit Valued Component of Food Sovereignty. This draws primarily from the qualitative data collected during semi-structured interviews. No mapped values are included for this section, as subsistence harvesting of country food in particular is addressed within other VC Sections, notably Terrestrial Harvesting, Marine Hunting, and Fishing and Freshwater.

For the purposes of this report, Food Sovereignty is defined as being the right of Inuit to access healthy and nutritious food, which is culturally appropriate, and harvested through ecological and sustainable methods (QIA 2019). The term food sovereignty is preferred to food security as it is considered to be a more holistic representation of the Inuit relationship with their animals and environment through food, encompassing more than the access to food inherent in the term food security, but also the right to choose how this food is accessed, an important element of empowering Inuit communities and stimulating their economies (QIA 2019).

4.7.1 Importance

Subsistence harvesting is a critical component of Inuit culture, and survival is seen as intimately linked to having the knowledge and cultural understanding required to provide food from the challenging Arctic environment. The provision of country food remains as important today as it ever has been, for while store-bought substitutes for country food are available, these imported products are often prohibitively expensive and for many participants are considered unhealthy or an inferior choice. Providing food from the land was seen by participants as the essence of survival, in a physical, cultural and emotional sense. Protecting and continuing these food systems, and in particular the central role that country food plays for so many families was described as being a holistic endeavour involving environmental protection to support a continued food source, and cultural conservation and transmission to ensure that there were future generations of Inuit hunters equipped to take on the challenge of obtaining the harvest.

The importance of protecting the sanctity of animal habitats was emphasized by one participant who drew a direct link between the availability of country food and the ability of future generations of Inuit to learn and continue their culture. Inuit consumption of country food was described as an intrinsic component of culture.

> *[C05] has a grandson age of nine years old. ... And he only eats country food. ... he barely eats any store-bought food, because he's raised on his traditional diet. … So, for [C05] and his generation, that's why food – protecting environment and food source and our – the habitat of our food is a major importance because even if he passes away, the skills and the dependability on the wildlife and on the land is passed down to the next generation. ... So, he wants to preserve the way of life, our culture, and our food to, to be able to pass on to his kids and grandchildren down, because it's what they know, it's what they do and it's a proven – we're still here. Still here and healthy.* (C05 2020b, interpreted from Inuktitut)

Food is seen by one participant as underpinning a system of morals or values. In the quote below they explain how a core value in Inuit culture is the importance that is placed on providing food for one's family and one's community.

> *So, us from the Arctic, could be millions of years that we've been living on the land and off our land. What our land produces is the food that has – so the main diets are caribou, ptarmigans, and fish, and seals because of the accessibility and they're around, but majority of the time ptarmigans and caribou are – and seals are – like to get through the year. ... So, for this reason we value and want to protect our food source because back then every, every community member, every Inuit, they don't want their kids to go hungry like how it is today. That's – one of our morals is to take care of our families. ... So, that's a – even though today the younger generation are still hunting and going around hunting and gathering, that value is still placed high not to – they don't want anyone to be hungry. ...* (C05 2020b, interpreted from Inuktitut)

Each country food has a season in which it is best gathered. These seasons, as described in one example below, are defined by a complex knowledge both of the availability of a food species but also when it is best, and most easily harvested.

> *Every year they go [to Pond Inlet] – every wintertime they go there to go get some halibuts.* (C13 2020)

Food preferences are defined by personal taste and are often described by Inuit as varying based on location. In the quotes below, participants explain how ringed seal or caribou from different areas are preferred due to their taste.

> *So, his father didn't go. He mainly went up there to go caribou hunting. So, no narwhal, fish or seals because his mother preferred the seals down here as opposed to Pond Inlet area. … Yeah, people tend to prefer seals around here because I guess around Pond Inlet their, the majority of the seals, ringed seals diet is cod. So, the [cod] affects the taste of the meat, yeah.* (C24 2020, interpreted from Inuktitut)

> *Yeah. I ordered caribou meat because I caught caribou this summer, and last year as well I caught, we caught three last year. And I kept telling my cousin, which is also my friend, that it feels like we're too spoiled to have … meat from Baffin Island. After having meat from Baffin Island and then I go caribou hunting during the wintertime from mainland, it just doesn't taste the same.* (A07 2020)

Food preferences also reflect different needs. In the quotes below participants explain how different groups, whether hunters on the land or elders, have different requirements and preferences.

> *Yeah mostly when we're out on the land we need the – we need the meat to eat – caribou – like we need meat to eat. Mostly like sometimes from caribou around there – like on the land.* (C19 2020)

> *Mm-hmm, because of older people, older Inuit and elders, they, it's like their, it's their diet, it's there, this is their sustenance and she wants to ensure that it continues to provide*. (A10 2020, interpreted from Inuktitut)

> *It [fishing] used to be very important back then when he was a hunter, but he doesn't hunt very much anymore, but it was very important to him … He just really loved the taste of it. He loved the fat from the fish, but it's too much now. But it's too much now, the fat. But when he was younger he just loved eating fish.* (A17 2020, interpreted from Inuktitut)

Food preferences can be an important driver for trading and exchange between communities. In the quote below, one participant from Clyde River explains how they will trade meat with family and in Pond Inlet. Trading and exchange are important for many Inuit, maintaining connections between families and communities and facilitating access to potentially preferred foods which may have highly regional availabilities.

> *You know, sometimes I do—we do get narwhal meat, the skin. But a lot of times I give seal meat, because the seals in their area, and our seals are different. The taste of the meat is different. Like there's quite a bit of people even in [Inuktitut spoken] they love the taste of Clyde River seal meat, because it's different from everywhere else. And family up in Pond love the seal meat that we have, so they want some, they asked for some, and I send out seal. But there's more narwhal up in there. So, if they harvest narwhals in June, because we start harvesting in our areas usually in July, beginning of July, but if it's up in Pond they harvest their narwhals earlier than us, so they do send us narwhal meat.* (C04 2020)

> *And the [caribou] meat is so precious that can – we order it all the time from family … But most of the time I try and catch as much caribou as I can and make it last a little bit longer. If not, I tend to order caribou. That's how much we love caribou meat. Nothing beats caribou meat. [Laughs]* (A07 2020)

When country food is not available – either locally, or more generally via the networks described above, some participants described seeking out store-bought alternatives. In the quote below, one participant explained how they preferred caribou but when it was not available they would seek out a store-bought stopgap.

> *He loves caribou so much that when he doesn't have caribou meat he eats steak, that's how important it is for him.* (A12 2020, interpreted from Inuktitut)

The preservation or caching of food in order to prepare for future shortages is an important Inuit tradition. One participant described this process with particular reference to fish, explaining how they would prepare fish by drying them to preserve them or store them in a cache for later use.

> *And [when he was young and fishing on sea ice at Salmon River near Pond Inlet] there was no worry about food insecurity because there was plenty of fish. ... They would dry the fish. You know how you dry them in a rack? So, they would do that. ... They had two, two drying racks. ... So, they would do*

> *it on both sides because the river was still frozen, and they could cross. So, they were able to go back and forth. ... So, the other thing Inuit used to do besides drying the fish is put a cache for later. ... Around there. So, they would form this sort of a mound, almost igloo shape with flat, kind of flatter rocks. Once they did that, they would start putting the fish inside and once there was enough, they would cover it. ... So, around October or November, they would come back and retrieve the fish. ... that they aged the fish in there ... Yeah, fermenting the fish.* (C15 2020a, interpreted from Inuktitut)

The variable success which is part of harvesting wild food has always meant that food sharing is an important Inuit tradition. Participants, quoted below, described how sharing was a way to feed large groups, and noted in particular the number of people who could be fed from a narwhal or seal.

> *Yeah. We, we butcher the narwhal all the way to the meat, to the bone. You take out the intestines, good for the, the, the meat goes to the dog. Rest of the meat goes to the dog food and for the people too. For the dry meat. Yeah. … Oh yes. Yeah, [we share food with] a lot of people. … It's just for the giving out the food to people. … Helping each other, giving away food. Country food, we like it*. (C20 2020)

> *If it was in my community with my family members I can say all the meat [from two seals] is gone within two days. It's usually – if it's one seal it usually goes to three to four family members. There's quite a bit of kids, grandkids, in the family, so around, see, 30 people can have a meal from the one seal. The one young seal that we harvested.* (C04 2020)

Sharing of food goes hand in hand with harvesting for many of the participants interviewed. As is explained below, many participants viewed it as an important duty of the hunter to redistribute the products of their skill and good luck by providing food for other community members.

> *But lately we've noticed a lot more narwhals in this area. … Every year we come in to this inlet and usually camp here. … I caught one [narwhal] this summer [2020] up here. … it's [narwhal] been kind of scarce around Clyde River. ... altogether we caught ten. ... [One narwhal feeds] Several families. We always share our meat. We never sell our meat, so. ... This was this year [2020] that we caught the ten narwhals. ... Yeah, we hunt them where we spot them. (*C03 2020)

> *Yeah [brought fish catch] back to the community and give it the public … Up here in north the poor doesn't get hungry.* (C19 2020)

> *It was a lovely time because her dad would go and now we are hunting in a kayak before, yeah. And then he would catch a snow whale and then he would have all the [Inuktitut spoken] ready for all the little children when he would come back with his kayak. They were all like ready to serve and he would just serve the children … Yeah, people used to share all the time. her*

> *dad shared just like every other hunter would share all their catch so it was the same thing. So good memories…* (A03 2020, interpreted from Inuktitut)

Rules around food sharing and distribution are complex and are often described as varying between communities, generations and even families. What is common is a desire and understanding that the redistribution of a harvest is an important responsibility and a duty inherent in the role of being a provider. In the quotes below, participants describe some of the motivations for sharing, including rewarding participation in the hunt, social relations, and the obligation to provide for those who are hungry.

> *They butchered it [narwhal] – they processed it on the shore … Yeah, they shared it with community members … It's good to share with other what you – what you help catch … It's very important … It's so nice when you're a helper and you are like respected and – and showing gratefulness towards being a helper – so he loves that feeling.* (A19 2020, interpreted from Inuktitut)

> *I gave the meat away to the main hunter, and he was going to distribute it out to his family members and friends.* (C04 2020)

> *[describing sharing of country food] Mostly likely we'll give it away to the people who is hungry. We ask them to come over and eat with us or, you know … Or maybe we ask them to go pick up some meat.* (A15 2020)

The health benefits of consuming country food were described by participants at length. In the quotes below, participants described the relative health benefits of country food versus store-bought food as well as noting that they felt "stronger and better" when consuming country foods and preferred to provide it to their children.

> *Seal, seal fat should be healthy ... the stuff that you get from stores are not as healthy as seal meat, or seal blubber, that's what people are saying.* (C11 2020)

> *Our diet of country food is also great for immunity. Especially seal meat as they are very rich in nutrients. Seal meat is also great to keep warm even though it's really cold and freezing weather, the seal meat can keep you warm. That's how important our food is to us. And the reason we want to protect our wildlife of our dependency to sustain us.* (C05 2021)

> *For her, [country food] it's extremely important and valuable to her because it's her way of life and that's what she knows and it's healthy for her. When she wasn't hunting and travelling much on the land for [inaudible] ... when she's not consuming country food as much on a daily basis she would start to feel like she's sick when she's now – yeah. And then when she consumes like seal meat and polar bear meat she will feel stronger and better.* (C10 2020, interpreted from Inuktitut)

> *Well, mostly I give my kids country food. I hate buying store-bought food, [Laughter] because our food is a lot healthier than store-bought these days. So, mostly I try and feed the family with our country food …* (A15 2020)

The relative ease and safety of consuming country versus store-bought food was described by one participant who felt that store-bought food carried higher risks of contamination due to the preservatives used.

> *And then, if you're out trying to, anywhere, if you're trying to keep eating store-bought food, you have to keep cooking it most of the time. Because they could be contaminated with the product that they use for keeping insects off more in a container where it might, it might have picked up whatever it is that they pick up. But if you keep eating country food, you can eat it. Eat, cook, raw ... Even dried.* (C06 2020)

Ultimately country food was described by many participants as an important part of their emotional health and wellbeing. In the quotes below, participants describe country food as a contributing factor to their happiness and fulfilment.

> *They gave all the meat to the whole community back then … It gives him joy to be able to share his catch … Because elders are always so much happier when they get fresh meat or fresh catch of any wildlife. So they're always so much happier.* (A13 2020, interpreted from Inuktitut)

> *[Hunting is] Very, very, important … It's our livelihood. Like I said, in our area seal, a lot of people – the main diet is seal. When we harvested those I was really happy.* (C04 2020)

While the subsistence value of country food was emphasized, what participants identified as being perhaps the most important aspect of country food was its cultural value. The practice of hunting and gathering connects Inuit to their land, but this country food also connected participants in both participating communities, with each other. Food connected participants through their families and within their communities (and even without, via trade and exchange) through the traditional Inuit practice of sharing the products of the hunt. The patterns of reciprocity by which Inuit share have been well documented in other settings, but participants in this study identified sharing as an important facet of their food sovereignty which enhanced the food security of their communities as well as enhancing their connection to their Inuit culture. The quality and health of country food was also emphasized, with participants describing the health effects of country food consumption as being holistic in nature, with positive benefits to the physical, emotional, and mental health of Inuit who consumed it.

4.7.2 Impacted Baseline

Project impacts should be considered against a food environment which for many Inuit communities, including Arctic Bay and Clyde River, has already been impacted by a range of factors. Factors already having an impact on food sovereignty in Arctic Bay and Clyde River include current Project infrastructure and activities, the transition to

cash and mixed economies, and ongoing experiences of poor quality food and diminished health outcomes related to food access and quality.

Concerns around food gathered from the Study Area were raised by participants. One example is quoted below, where a participant explains that they have been warned not to consume fish from the Mary River area due to potential health impacts.

> *We've already known, knew, from our elders that not to harvest fish around this area. Because they knew about Mary River. Because they used to get gather … Soapstone. And then we already know that – I mean, they warn us not to eat too many fish around this area … Yeah. Stomachache … And you get diarrhoea.* (A16 2020)

Impacts from the Project which are already being felt include harvesters having to travel farther to have a successful harvest. In the quotes below, participants described how Project effects are having an impact on the distribution and availability of important species including seals and narwhal. Increased travel time for harvesters means potentially reduced harvests and increased costs, which as one of the participants quoted below explains, is directly related to diminished community food security.

> *Everything kind of changed a lot ever since Mary River started mining. More ships coming in, less narwhals and less mammals. … Yes, I, I have to go a little bit further that area to go look for meat.* (C20 2020)

> *But totally being told that there's the large reduction of narwhal that doesn't migrate through there hardly anymore … It's very concerning because that used to be such a huge area for narwhal population and now he says he can say that some – he knows of some people in Pond Inlet that are actually going to Arctic Bay to go narwhal hunting because of the lack of narwhal in that area and it's very concerning for him because of – he wants his family to have food security in Pond Inlet.* (A01 2020, interpreted from Inuktitut)

> *... the seals here are highly sought after throughout Nunavut because they taste so good around here, they taste different. … So, as soon as you cut up a seal, hundred percent of the people are going to want to eat that. … right now, people in Pond [Inlet] – the seals are being impacted by the shipping activity ... it's becoming harder and – for residents of Pond to harvest seals because they're moving away and the people are not – they're being impacted where they can't access seals anymore because they're moving away. ... And then it's impacting the health of the community, because seal meat has been a vital part of their diet for so long and nutrition that … when they can't … harvest them then their health is being impacted. Not getting the nutrients and the food source that they need and they're used to.* (C05 2020b, interpreted from Inuktitut)

Past contaminant concerns remain a factor in many participants' consideration of country food. Concerns raised about high levels of mercury and other contaminants in country food continue to impact the way community members view their harvest. As

the participant quoted below explains, these past experiences have helped to inform their current concerns about the potential influence of the Project on food health.

> *Because like in the past we heard about contaminants, a lot of it, and we got scared. But now what the Mary River, well people from Mary River are saying that there's nothing wrong with it and it's not going to impact the animals. But we don't know. Down the road, we might see that too. And like there's a lot of us that still eat country food and it's something that we rely on. We can't just live off store-bought food because we're used to our meat. … And we – we're used to the meat that we eat off the land.* (C26 2020)

The economic transition of Inuit communities, from harvesting towards an increasingly cash-dependent economy has fundamentally altered the country food network. One participant described this transition as being from hunting to working, where previously hunting had been considered the basis of 'making a living'.

> *... in those days people did not work to make a living, it was only when the ship comes up from the Hudson's Bay Company that they would work for a while … like hunting was the money making process for people who – that does that.* (C11 2020)

This changing social landscape of food increasingly demands a significant cash outlay to participate. Hunting is an expensive proposition, demanding equipment and gasoline. But for those who are not able to hunt or are not connected socially to a hunter who can provide for them, accessing country food through other channels is also expensive. On participant explains below that many Inuit are obliged to trade cash to access country food, through inter-community trade facilitated by air cargo shipping.

> *Today also Inuit are able to get country food through air cargo, so they can have food security through that as well.* (A11 2020, interpreted from Inuktitut)

> *… it [the Project] won't have any effect on Inukness because for people that don't have hunting partners it's sometimes the only way they can get country food. She doesn't feel that it's going to take your Inukness away at all not being able to – like it's happening today already because there are people that are relying on country food being shipped because they don't have access to a hunter that will be able to provide for them.* (A11 2020, interpreted from Inuktitut)

The role of the Project's current operations in this changed economy and its impact on food sovereignty was summarized by one participant, quoted below, who explained that while participation in the employment potentially offered by the Project might mean cash this was not synonymous with an increase in country food for community members.

> *And then the people at, working at the Mary River Mine are very happy, because of the expansion, because it's a guaranteed employment opportunity, but not once did Mary River or Baffinland ever provide any country food to anyone.* (A10 2020, interpreted from Inuktitut)

Concerns about the relative health of store-bought versus country food were raised by one participant who pointed out that community members were noticing the impacts of consuming store-bought food on their health.

> *And when those years are happening [thin ice] we're stuck with store food and most of us can't handle it very well, if we, if we keep taking the store food, our guts or whatever … you're never full. And then so, you become, you get so much of that fat they call it a cholesterol that builds up in, you hardly burn that off 'case normally times, we take the fat with the meat that we get from the animals, from the out of the water, especially the seals so, we mixed that with our meat, and that different cholesterol. That's good to burn, you know? … But if we keep eating store-bought food, not being able to go out here for seal, we're pretty much dead people pretty soon.* (C06 2020)

The impacts on health and resilience from not being raised on country food were raised by participants, as one person noted in the quote below, they felt their children were "weaker" than others who had consumed more country food.

> *Well, from my knowledge anyways, my children don't like eating as much hunted food from our area but, there are, once they start going older, they start realizing that they have to get it off of the land and we, we go hunt from and they're weaker from the group that has been eating more country food.* (C06 2020)

Inuit are already experiencing the effects of a range of factors on their food sovereignty. Changes due to existing Project effects, concerns around contaminants in the environment and changes in the socio-economic and socio-cultural landscape of food are all playing a role in changing how many Inuit in Arctic Bay and Clyde River choose, access, and consume their food.

4.7.3 Project Interactions

Participants in both Arctic Bay and Clyde River expressed significant concerns that Project Interactions would lead to a decrease in the populations of animals traditionally harvested for subsistence, and potential changes to the distribution of these animals. Project Interactions with these wildlife populations are discussed in other report sections in greater depth (see Sections 4.2 - 4.4). The impacts described in these sections were seen by participants as fundamentally connected to negative impacts on the food sovereignty of their communities.

Project-related decreases in the availability of important harvested species as well as changes in their location or distribution were seen by participants as altering the availability of preferred country foods, as well as its safety for consumption and its potential cost. In the quotes below, participants described these concerns pointing at what they saw as a direct link between a decrease in animals and impacts on Inuit food systems and diets.

> *My name is [personal name] and I am afraid, very concerned that eventually all the wildlife is going to disappear. We won't have any more country food within that area. When I was growing up, there was hardly any established communities, besides the Hudson Bay Company. We looked like we were very poor back then, but we were very rich in terms of the abundance of country food. She's afraid that eventually all the wildlife is going to disappear from there.* (C12 2020, interpreted from Inuktitut)

> *Yeah, because she knows that the Mary River project will not be providing the sustenance and the wildlife that they need even if they reduce the numbers and with the high cost of imported foods, it's going to be way more difficult to have nutritious food if the wildlife is affected … she's worried about the food supply, because it's also, and they won't get any handouts from companies, they won't be given any country food by the companies that are just looking at economic opportunities rather than looking at the people that will be affected.* (A10 2020, interpreted from Inuktitut)

Concerns about reduced country food were a particular concern for one participant who noted that it was the most vulnerable community members, including elders, who would be most impacted. For this participant, the loss of a preferred, and previously widely available food, would require compensation.

> *Yeah, there is no price for the loss of wildlife. So, he thinks that there would be a bigger reduction in the amount of wildlife in that area with the increased shipping, but if the project went ahead, there would have to be a significant amount of compensation for the people to compensate for the loss of wildlife, because especially the Elders would be very hungry for what they are used to, because especially historically with that area being just full of wildlife, they didn't even have to try that hard to even try to harvest because there was so much. But that would change drastically, and even for us younger generation, because we know like, like you – like we've, we've tasted Muktuk, we know what it's like, and if that is reduced, then there would have to be significant compensation.* (C15 2020b, interpreted from Inuktitut)

Concerns about impacts related to potential contaminants entering the environment from Project activities were raised by many participants, as they describe in the quotes below. Participants saw these contaminants as having a direct and negative impact on their health and food security.

> *So he is just reiterating the contaminated area ... he doesn't approve of the project cause I think it's having too much devasting effect because Inuit rely on feeding their families from the wildlife in the area.* (C01 2020, interpreted from Inuktitut)

> *So, when they start building the railroad for Phase 2, that blasting and activity with the construction is going to contaminate the area. He doesn't really like – and like that could be in all directions. And that will impact the health of our caribou, along with the fish. And potentially dangerous to human consumption. (C13 2020, interpreted from Inuktitut)*

Uncertainty about the health of harvested foods has consequent negative impacts on Inuit mental health, as described by one participant during a verification meeting in Clyde River.

> *That's our tradition of consuming from our environment since forever whether it be caribou, fish, or seal and would not always bring a lot of food from home. Today we bring more food from home when we go but, maybe there could be people who won't have any food to eat. Concerned about the animal, caribou for example they caught – whether it's healthy to eat or not. This could affect our mental health.* (C11 2021)

The impact of ore dust on the safety of country food was also considered to be a part of this contaminant risk by participants, who in some cases had already heard or seen it being blown around the Study Area. In the quotes below, participants describe how they imagined (and had previously experienced) these contaminants would move through the food chain, impacting country food and subsequently the health of Inuit who might consume it.

> *From the dust from the ore flying around … Maybe the meat might not be good to eat … Yeah also like yeah mostly caribou meat.* (C19 2020)

> *And he views it that with the construction of the railroad, that's going to – that dust is going to be going on the land and the tundra and the lakes and the rivers. And that will impact the wildlife that are up there for sure in a bad way. Yeah, which in turn will have a chain, chain reaction let's say because we consume food and that area has caribou and birds and everything that we eat.* (C13 2020, interpreted from Inuktitut)

> *As Inuit we are eat – we eat seals … And then some studies have suggested that there's some mercury in our diet on seals. … So, if there's – if, like seals that are in the ocean are eating and are contaminated and they contain mercury, just imagine what the mine activity's – how – what minerals or contaminants that would show up in our bodies if the caribou and the birds are impacted in the water source. ... So, his – for him, all the dust produced by the train activity and with all the iron ore like during transports – moving like this, right? That's producing dust and that dust is travelling and going on the land and going to the food source. ... us Inuit in the Arctic, we don't want our food sources to be eating any kind of contaminants because that's our, that's our food source and that's our – part of our diet. ... [if] airborne contaminants going to the land water source, and it's accumulating in their bodies and being absorbed. So, if we harvest those caribou or any contaminated birds, then it goes into our system and we're – our health is impacted by consuming the meat that we're used to.* (C05 2020b, interpreted from Inuktitut)

Concerns about food costs were expressed by one participant who noted that Project impacts on wildlife might lead to an increased demand for country food purchased from other communities, a trade which they felt was already straining the budgets of elders and others.

> *Concern [about increased shipping traffic] not for – not only for my community, but for Pond Inlet too because they have more elders than Clyde River and I'm concerned for the elders, like they will be craving for their country food, but, yet it's so expensive to fly meat in between communities. Like and they – their, their income is very limited, like elders' pension and how are they going to…* (C26 2020)

Increasing travel distances for harvesting were seen by participants as being an important Project effect. As animal populations are impacted, participants noted that harvesters would be facing increasing challenges to find wildlife and this would lead to increased travel times, costs, and potentially risks, as they described below.

> *I don't know how it's going to affect it but we get our – the whales come in through here. A lot of them go around it as well, but whales are spending their winter in Baffin Bay and then coming in to feed in here along towards Repulse Bay area as well. So, I don't know how it's going to affect us. With increase of shipping and with the ships being so big, then probably going to say for sure they're going to get hit, unless there's 100% monitor on board. But for sure, if they're going to break the ice like they did, there's going to be people losing equipment, losing hunting time to feed their families, even if they're not employed by that mine.* (A07 2020)

> *Even that, like I said, the younger generation will, will not to worry about whether they going to catch a caribou or not. But, they're still going to say I, I – always I could eat some caribou meat, fat ones and all that and they know that. But, yet it's going to be harder because it's going to be more, more travelling*. (C18 2020)

> *He feels that there's going to be more extreme hardships for hunters to be able to have access to their traditional – to be able to sustain their traditional diet and to be able to have access to the wildlife that used to be more readily available.* (C15 2020b, interpreted from Inuktitut)

Participants expressed their concerns around Project Interactions as being focused on questions of access, quality, and cost of country food – which link or impact directly on many of those qualities which they identified as being most important. Country food is valued as an important cultural conduit and touchstone, because participants see it as a cost effective, healthy, and most importantly desired food source, which they directly link to a holistic sense of wellness connecting physical, emotional, and mental health.

In summary, participants from Arctic Bay and Clyde River anticipate the following potential interactions between the Project and their Food Sovereignty values:

- Impacts to the harvesting VCs listed in Sections 4.2.4, 4.3.4, and 4.4.4 directly impacting participants' ability to access country foods;
- Overall reduced availability of country foods;

- Reduced confidence in the health of country foods due to concerns with dust and other potential contaminants from Project activities;
- Increasing food costs causing increased pressure on country food sources; and
- Increased travel costs due to the need to travel farther to access preferred country foods.

5. CONCLUSION

5.1 SUMMARY

This Report outlines the importance of the Study Area for Marine Hunting; Terrestrial Harvesting; Fishing and Freshwater; Travel, Trails, and Habitation; Cultural Continuity; and Food Sovereignty to Inuit from the communities of Arctic Bay and Clyde River. Current impacts to these VCs from a range of sources are described, along with potential impacts from Baffinland's Mary River Project.

The site-specific data collected during the course of this Study demonstrate that the Study Area is of great importance to the communities of Arctic Bay and Clyde River. The mapped data clearly demonstrate that people from both communities use or have used the Study Area across multiple generations. A combined total of 515 site-specific values were reported in the Study Area (the Project Footprint, LSA, and RSA), including (but not limited to):

- Sites and areas used for terrestrial harvesting, marine hunting and fishing that provide the country food sources that underpin Inuit food sovereignty in the region;
- Important wildlife habitat, including calving areas for caribou and narwhal in the terrestrial and marine environments respectively;
- Important travel routes that are relied upon to access hunting grounds and other communities; and
- Areas relied on for the continuity of culture, such as soapstone collection areas, areas used for transmission of knowledge and IQ, campsites, and gathering places used by numerous communities.

Through data collected during interviews with Inuit elders and land users, the Study has identified a number of potential interactions between the Project and each VC. The Study's VCs are strongly interconnected, meaning that impacts to values and practices linked with one of the Study's VCs will have additional impacts on other VCs.

Participants anticipate the following potential interactions between the Project and their Marine Hunting values:

- Impacts to important marine species habitat and migration routes due to increased shipping traffic (including congestion and noise);
- Displacement of marine species from the Study Area due to increased shipping traffic (including congestion and noise);
- Reduced marine hunting opportunities due to the above interactions;
- Reduced animal quality due to perceived or actual contamination of marine species by shipping activities such as ballast water exchange and fuel leaks or spills;

- Avoidance of harvesting in the Study Area due to perceived contamination; and
- Impacts to sea ice harvesting routes due to dust and changes in ice due to shipping activity.

Participants anticipate the following potential interactions between the Project and their Terrestrial Harvesting values:

- Impacts to caribou movement patterns due to increased Tote Road (during construction) and rail traffic (including noise and other disturbances);
- Reduced availability of caribou in preferred hunting areas;
- Displacement of animals including snow geese, ptarmigan, weasel, and rabbits due to increased Project activities;
- Wildlife mortality risks while crossing Tote Road and rail crossings;
- Contamination of animals and animal habitat due to dust settling on vegetation and water sources;
- Contamination of food plants due to dust settling on vegetation and water sources;
- Avoidance of preferred harvesting areas due to perceived and actual contamination; and
- Impacts on access to important country food sources due to all of the above impacts.

Participants anticipate the following potential interactions between the Project and their Fishing and Freshwater values:

- Increased contamination of snow, ice, and water bodies from dust caused by Project components associated with the mine and the Tote Road, in areas with existing contamination as well as pristine areas currently without contamination;
- Deterrence from traveling to impacted areas due to perceived or actual contamination of freshwater sources out on the land;
- Dust contamination of drinking water sources in communities, as well as the reservoir at the mine site;
- Impacts to wildlife health due to consumption of water sources contaminated by dust from Project activities; and
- Impacts to fish health due to dust contamination of water and fish habitat.

Participants anticipate the following potential interactions between the Project and their Travel, Trails, and Habitation values:

- Impaired use of marine travel routes used to access camps and marine hunting areas due to increased shipping activity; and
- Impaired access to terrestrial hunting areas due to the construction and operation of the Northern Railway.

Participants anticipate the following potential interactions between the Project and their Cultural Continuity values:

- Disruptions to physical heritage sites including archaeological evidence, through Project construction and operation;
- Disruptions to "sense of place" through decreased ability of Inuit to connect with nature and spend time in places that are culturally and spiritually meaningful, due to Project activities;
- Disconnection from culture due to the above disruptions; and
- Psychosocial impacts such as increased substance abuse due to the above disconnection and disruptions.

Participants anticipate the following potential interactions between the Project and their Food Sovereignty values:

- Impacts to the harvesting VCs listed in Sections 4.2.4, 4.3.4, and 4.4.4 directly impacting participants' ability to access country foods;
- Overall reduced availability of country foods;
- Reduced confidence in the health of country foods due to concerns with dust and other potential contaminants from Project activities;
- Increasing food costs causing increased pressure on country food sources; and
- Increased travel costs due to the need to travel farther to access preferred country foods.

In summary, impacts from the Mary River Project, working in combination with impacts from a range of other stressors, will have a direct impact on the ability of Inuit from Arctic Bay and Clyde River to continue resource harvesting, travelling across and using the land, and transmitting cultural knowledge and IQ between generations in the Study Area.

5.2 CLOSURE

Should you wish to discuss any aspect of this Report further, please do not hesitate to contact Rachel Olson at 604-563-2245.

Sincerely,

ORIGINAL SIGNED

Rachel Olson, PhD

_____

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C26 2020. Transcript of October 23, 2020. Interview from the Qikiqtani Inuit Association's Tusaqtavut Study Specific to Baffinland's proposed Phase 2 of the Mary River Project for the communities of Arctic Bay and Clyde River

APPENDIX 1: ENGLISH LANGUAGE CONSENT FORM

CONSENT FORM
INUIT QAUJIMAJANGIT COLLECTION

THIS SCRIPT IS FOR READING TO A PARTICIPANT BEFORE AN INTERVIEW DURING INUIT LAND USE / INUIT QAUJIMAJANGIT DATA GATHERING

Purpose:
QIA is collecting Inuit Qaujimajangit (IQ) to support protecting and advancing the rights and interests of Qikiqtani Inuit. The knowledge you share will be stored in a QIA computer database. The knowledge will be used for the NIRB review of the Phase 2 application for the Mary River Project.

Consent:
We will ask you about your knowledge on areas of traditional Inuit land use and Inuit knowledge about the land. We ask you to consent to have your responses during the interview recorded on maps, in notes, and in audio recording. You may respond in any way you are comfortable. You do not have to answer questions and you can end the interview when you want to. If QIA takes any pictures or filming of this interview, I consent to QIA using my image.

You agree to give QIA permission to use the knowledge you share to defend the rights and values of Inuit under the Nunavut Agreement, for the Mary River Project or any other work QIA does in the best interests of Inuit. You agree QIA will not own the knowledge you share but that QIA must protect the knowledge you share when QIA uses it.

You understand you can ask QIA to provide me a copy of the knowledge you share, but that QIA may also keep a copy for its work. You give QIA permission to publically use any personal information about you, including your name, that is part of the knowledge you share during this interview.

Privacy:
QIA respects our Inuit members and their privacy. We follow the Canadian law about privacy that has rules about collecting, using and disclosing personal information. That is why we have this script.

When we use the knowledge you share, your individual responses will not be linked to your name so your privacy is protected in our reports. We will keep your personal information safe by using computers with passwords. We will only keep your personal information as long as it is relevant for the work of QIA, or for as long as the law requires.

If you want to know more about how your privacy is protected at QIA, please ask the interviewers and they will tell you how to contact QIA.

Agreement:
Do you have any questions? If you agree to what was said, we will write down your name on a list. We will give you a copy of this letter so you have it.

_____	_____	_____
Name	Date	Place

CONSENT FORM
INUIT QAUJIMAJANGIT COLLECTION

Participant Name: _____

Community: _____

Purpose

QIA is collecting Inuit Qaujimajangit (IQ) to support protecting and advancing the rights and interests of Qikiqtani Inuit. This IQ collection supports the ongoing development of the QIA IQ database, in this case specifically about the Mary River Project and the proposed Phase 2 application. IQ will be collected on areas of traditional use, marine and terrestrial environments, wildlife, activities on the land, water and ice, harvesting, customs, beliefs, values and other aspects of cultural expression and IQ.

By signing below, I indicate my understanding that:

1. I am an Inuk, and a member of the Qikiqtani Inuit Association (QIA). I understand that QIA is working with the Firelight Group to conduct these interviews.

2. I consent to have my words and responses recorded on maps, in notes, and using audio and video recording equipment.

3. I wish to participate in the interview, I am free to not respond to questions that may be asked and I am free to end the interview at any time I wish.

4. At the conclusion of the interview, QIA will be given possession of all materials containing my IQ contribution. QIA will maintain intellectual property rights over my IQ contribution and may use the information in pursuit of its work defending and communicating the rights, interests, and values of Inuit under the Nunavut Agreement. This includes, but is not limited to, sharing information for the purposes of negotiation or participation in regulatory or court proceedings. I direct QIA to protect my IQ contribution in all its forms.

5. I understand some of my IQ contribution might include information where I could be considered the owner of copyright or other intellectual property rights. If this occurs, I understand I will continue to be the exclusive owner of any property rights, if any, that I have in my IQ contribution. I do not assign or waive any legal rights I have in my IQ contribution.

6. I appoint QIA to act as my representative to use my IQ contribution for any purpose, in any format. I give QIA a non-exclusive licence to use my IQ contribution, and to grant further licence to my IQ contribution for any purpose that QIA considers to be in the best interests of Inuit.

7. QIA shall hold my IQ contribution until such time as I request in writing that QIA return my IQ contribution. If I request the return of my IQ contribution, I agree QIA may keep a copy of the IQ contribution in all its forms for its continued use pursuant to its non-exclusive licence.

CONSENT FORM
INUIT QAUJIMAJANGIT COLLECTION

8. I give my permission to QIA to publically disclose and use any personal information about me that is contained in my IQ contribution, including permission that my name can be publically associated with my IQ contribution and my name and personal information may be used by QIA in connection with any QIA use of my IQ contribution.

9. I consent to any filming, recording or photographing of IQ interviews where I am present and use of all images of myself in whatever form.

Privacy Statement

At Qikiqtani Inuit Association (QIA), respecting privacy is an important part of our commitment to our members. We uphold the 10 principles of the federal legislation known as PIPEDA (Personal Information Protection and Electronic Documents Act), which sets out rules for the collection, use and disclosure of personal information.

Any time you participate as a respondent, you can be assured that your individual responses will be kept confidential and never linked to your personal identifying information without your express permission (as explained above). We safeguard all personal identifying information by password-protecting and storing it on a secure network. We only keep personal information for as long as it remains necessary or relevant for the purposes outlined above, or as required by law.

If you have any questions or concerns about how your privacy is protected at QIA, or if you wish to review your information, please contact our Privacy Officer by e-mail at ExecDir@qia.ca, or by mail to Igluvut Building, 2nd floor, P.O. Box 1340, Iqaluit, NU X0A 0H0, or by telephone at (867) 975-8246.

Signatures to Consent

By signing this consent form, you are allowing QIA to use the information you provide.

_____ _____

Signature of participant Date

APPENDIX 2: INUKTITUT LANGUAGE CONSENT FORM

ᐊᖏᑕᐅᓂ ᑎᑎᕋᕐᓴᖅᓯᖅ
ᐃᓄᐃᑦ ᖃᐅᔨᒪᔪᑐᖏᓐᓂᒃ ᓄᐊᖅᑎᓂᒥ

ᒎᒃᓂᐊ ᐅᖃᓕᒫᖅᑕᐅᖃᑎᒋᔭᐊᖅᑐᑦ ᐊᐱᕐᓯᖅᑕᐅᔪᐊᖅᑐᒍᑦ ᐊᐱᕐᓯᖅᑕᐅᒋᐊᓕᐅᖅᑭᓐᓂᒃᓴᓂ ᐃᓄᐃᑦ ᓄᓇᒃ ᐊᑐᖃᖏᕐᓂᖅᓯᒪᓂᖅ / ᐃᓄᐃᑦ ᖃᐅᔨᒪᔪᑐᖏᓐᓂᒃ ᑎᑎᖅᑲᓂᑦ ᓄᐊᖅᑲᓂᑦ

ᐃᓕᓴᐅᕐᓇᒃ:
ᖃᑭᖅᑕᓂᒃᑯᑦ ᓄᐊᖅᑎᓚᒋᑕ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔪᑐᖏᓐᓂᒃᓯᓂᒃ ᐃᑲᔪᖅᑐᑎᒃ ᓴᓗᔨᓂᕐᒥᒃ ᓯᓚᑦᓯᐊᓂᖅᑐᑦᓴᓗ ᐱᓕᕆᔨᐅᑎᓂᑦ ᐊᒻᒪᓗ ᐃᓕᓴᐅᒪᓕᒪᓂᕐᓂᒃᓴᓂ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔪᑐᖏᓐᓂᒃᓴᓂ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔪᑐᖏᓐᓂᒃ ᑎᑎᖅᑲᓂᑦ

ᐊᖏᕈᑦ ᑎᑎᕋᖅᓴᓴᖅ
ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᕐᓗᖏᓪᓗᒃ ᓄᐊᕐᑎᓂᕐᒥ

ᑐᑭᓯᒃᑲᓂᕐᒪᔪᐃᓴᑦ ᖃᓄᖅ ᖃᐅᔨᒪᔭᐅᓚᐊᖃᖅᖏᓐᓂᑦ ᓴᓇᑎᓴᐅᓯᒪᓕᒫᖅ ᖁᑭᖃᕐᓂᐊᖅᑎᓂᑦ, ᐊᑎ ᐊᐱᓚᓂᐊᖅᑯᑎᑦ ᐊᐱᕋᓯᖅᑎᓂᑦ ᑕᐅᑯᐊᓗ ᐃᓕᓴᐅ ᐅᖃᐅᔨᓴᓂᐊᖅᓯᒪᑕ ᖃᓄᖅ ᐅᖃᖅᖁᖃᑲᓇᙱᓕᒫᓂᕐᓴᐅᓕ ᖁᑭᖃᕐᓂᐊᖅᑯᑎᑦ.

ᐊᖏᕈᑎᑲᑎᒪᔨᖅ:
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APPENDIX 3: INTERVIEW GUIDE

Interview Guide for the Qikiqtani Inuit Association Knowledge and Use Study for Baffinland's Mary River Mine Phase 2 Expansion Project

This guide includes:

- Pre-interview setup guide
- Interview questions
- Mapping notes
- Mapping codes

1. PRE-INTERVIEW

Before formally beginning the interview, ensure the following steps have been completed:

Introductions

- Introduce yourself and the research team, who you work for, who you were hired by and who you report to.

Give the participant an overview of the Project

In advance of the interview, the research team will have developed a one- or two-page summary of the proposed Project and its components. Provide the participant with the Project summary and/or describe it in detail verbally and demonstrate on Google Earth where Project components would be located in relation to landmarks such as the community, neighbouring towns, roads, rivers, lakes, etc.

Explain the mapping and interview process and goals of the research

Read the following:

> *The purpose of this research is to document community members' knowledge and use on the land in relation to the Project. This means we will be mapping places and areas where community members hunt, trap, fish, collect plants and medicines, camp, practice other culturally important activities and spend time out on the land. We will also be recording other cultural places and environmental features that are important to you and the community such as sacred sites, teaching areas, or gathering places. We will be focusing on the Study Area outlined by [define Study Area and indicate its location on the map]. Afterwards, we will map other areas that are important to you.*

> *From this, we will be compiling all of the data and preparing a report for the community based on community members' knowledge and use in the Study Area. This report will be given to the community so that they may use it to support their goals and objectives.*

Provide an opportunity for the participant to ask questions

- Providing accurate answers to participants' questions is an important aspect of free, prior and informed consent.
- Technical questions relating to the Project should only be answered if you have the necessary Project information from the proponent or regulator.
- Questions that you cannot answer should be directed to the community coordinator, principal investigator or proponent contact, as appropriate.

Review the consent form

- Read the consent form aloud to the participant.
- Ask the participant if they have any questions.
- Once the participant's questions have been answered, ask them if they give their consent and, if yes, ask if they will sign the form are comfortable signing the consent form.
- If the participant would prefer to give verbal consent, ensure that the audio recorders are on, read through the consent form, and have the participant provide their verbal consent for the recording.
- If the participant does not sign the consent form or provide recorded verbal consent, do not continue with the interview.

2. INTRODUCTION

[Complete the interview checklist and pre-interview section above, then read the text below with AUDIO & VIDEO RECORDERS ON at the start of each interview.]

Today is [date]. We are interviewing [participant name] for the Qikiqtani Inuit Association knowledge and use study for Baffinland's Mary River Iron Mine Project. Thank you for coming.

My name is [name] and my co-researcher(s) is/are [name]. We're at the [building/office] in [community] in Nunavut. [Participant name] has read and signed the consent forms, and we have assigned him/her participant ID [number]. We have explained the purpose of the study, mapping process, and interview plan. We will be mapping in Google Earth at 1:50,000 or better, unless otherwise stated.

Primary Goal: to document community knowledge and use in the area of the Project. We'd like to know how you have used these areas, as well as what you may know about how community members have used it.

3. BACKGROUND AND EXPERIENCE

3.1 PERSONAL INFORMATION

- What is your full name?
- Place of birth?
- Age and year of birth?
- Where you were raised?
- Beneficiary of the Nunavut Land Claims Agreement?
- Parents' and grandparents' names?

3.2 GENERAL USE QUESTIONS

Be sure to ask the following questions with Google Earth centred on and displaying the entire Study Area. Questions in Section 3.2 are designed to give an overview of the parts of the Study Area that are important to participants, and how they use this area and its resources.

For this first part of the interview, we are hoping to get an overview of how you or your family members use this area and whether it is important to you. We will map these locations in more detail afterwards.

Have you ever used the area around the Project, or areas nearby?

- If yes, what activities have you done there?
- Which locations or areas are used?
- When did you do them?
- Who with?
- How did you learn about this area?
- If no, why?

Have your family or community members ever used the area around the Project, or areas nearby?

- If yes, how have family/community members used the area? What did they do?
- Which locations or areas are used?
- If no, why?

Is the Project area important to you / your family / your community?

- If yes, what makes this area important?
- If no, why?

Do you use any other areas close to the Study Area?

Are there other areas that are important to you?

Are there other areas that are important to your family or your community?

4. DETAILED DISCUSSION OF USE AND OCCUPANCY

Section 4 of the interview will focus on a more detailed discussion of the participant's use and occupancy of the areas identified in Section 3. Skip to the subsection below for each identified activity or value as appropriate to find relevant questions.

The goal is to discern why an area and/or activity is important, whether the participant's use or experience of an area has changed in any way and how the participant feels the proposed Project may affect their use and experience of the area.

Mapping notes

Ensure all features are mapped below an eye height of 10 km, where possible. Note when features are mapped at a coarser scale (see modifiers below).

When mapping routes and linear features in Google Earth, follow the actual route indicated by the participant and follow natural features. Do not record a straight line from A to B.

When mapping polygons in Google Earth, avoid mapping large areas where possible; follow natural features and avoid recording straight lines. Ask the participant to be as precise and specific as possible.

For each site mapped in Google Earth, ensure to include the following in the Name field:

- The activity code (e.g. Permanent Habitation, PX)
- The mapped site number (i.e., sequence in the interview)
- Any relevant modifiers:
    - If second-hand knowledge, map with a *
    - If they were with someone who carried out the activity, map with a +
    - If the activity was for commercial purposes, map with a $
    - If an approximate location given, map with a ?
    - If mapped above 10 km eye height (i.e., 1:50,000), map with a ^
- The Participant ID

Example map code:

PX01*?^$-X01
[ActivityCode/SequenceNumber/Modifier(s)-ParticipantID]

For each mapped site, ensure to include the following in the Description field:

- Who was there? (Spell out all proper names)
- What activities took place at the site
- When they were first there, last there, how frequently they return there, and whether they plan to return there in the future? (Include the year, month and season)

- Relevant value-based information on why that area is used for that purpose. This may include the importance of the site for kinship, ecological, or knowledge transfer values. (See follow-up questions below)
- Reference to any other recorded values that may be related (e.g., cabin access by recorded route TR02-X01)
- Include trapline number, if applicable

Make sure to record all other activities and values in this area. See further detailed questions on additional values throughout Section 4.

Next, we will talk about each of the important areas you just discussed and we will try and record as much as possible on the map while we do so.

Leading questions

It is important not to ask "leading" questions. A question may be leading if it suggests a particular answer or assumes a particular answer or reality. Ask yourself if the questions you are asking encourages a particular answer over other possible responses?

DON'T ASK: "This Project will impact moose populations. How does that make you feel?"
DO ASK: "Do you think the Project will impact moose populations? How?"

DON'T ASK: "You like camping here, right?"
DO ASK: "Do you like camping here?"

4.1 HABITATION

Permanent Habitation (PX) & Temporary Habitation (TX)

Can you show us where you were born? (BP)

Can you show us where you live? (PX)

Can you show us where have you stayed overnight in one of the following?

- A cabin you built or used, campsite, tent, other temporary or permanent structures?
    - How many times have you stayed there?
        - Once or short-term (less than 3 days): (TX)
        - More than once or long-term (more than 3 days): (PX)

Read the map code aloud for each mapped feature.

Example map code:

PX01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] stayed at this cabin with [names] in February 2018. [Participant name] built the cabin in 2010 and they have stayed there every summer since 2010. [Participant name] accesses this cabin through the trail recorded as TR02-X01. They plan to return there in 2019.

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- When did you first stay here?
- When did you last stay there?
- How frequently do you use this location?
- Can you describe where this place is?
- Can you describe what this place is like/the current conditions of this place?
- How do you get there?
- What is this place called? Does it have any other names in Inuktitut?
- How did you find out about this place? Who showed it to you?
- Why do you go there?
- What other activities do you do when staying there?
    - Follow up with questions from the relevant parts of Section 4.

- Specifically, have you taken younger generations there? Do you teach them there? If so, what do you teach them? (Map as TA)
- Is this place important to you/your family/community? Why?
- Is this place important for your culture/way of life? Why/how so?
- Can you describe what it is like to be in this place? How does it make you feel?
- Are there many places like this one, or is this place unique? What makes it unique?
- If this Project were to go ahead, how would that make you feel about visiting/staying at this place in the future?
- How would you explain the importance of this place to people who do not know it/the government/industry?

4.2 TRAVEL ROUTES

This refers to routes used specifically for hunting, trapping, gathering plants, accessing camping or fishing areas etc, rather than just driving on a highway

Trail (TR)

Can you show us routes you have travelled by foot, quad, snowmobile, truck or other means?

- When did you first use this route?
- When did you last use this route?
- What did you use this route for (e.g. for hunting or plant gathering, or to reach fishing, camping, or other locations)?

Can you show us old trails that have been used by community members? (Map with *)

- When was this route used?
- Who was using this route?
- What did they use it for (e.g. for hunting or plant gathering, or to reach fishing, camping, or other locations)?

Water route (WR)

Can you show us routes you have travelled along creeks, lakes or rivers by boat?

- When did you first use this route?
- When did you last use this route?
- What did you use this route for (e.g. for hunting or plant gathering, or to reach fishing, camping, or other locations)?

Can you show us old water routes that used to be used by community members? (Map with *)

- When was this route used?
- Who was using this route?
- What did they use it for (e.g. for hunting or plant gathering, or to reach fishing, camping, or other locations)?

When recording routes and linear features in Google Earth, follow the actual route indicated by the participant and follow natural features. Do not record a straight line from A to B.

Read the map code aloud for each mapped feature.

Example map code:

PX01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] travels along this route with [names] in order to access the [related value] located at [identity e.g., PX01-X99]. They learned about it from [name] and have travelled along it every [season] since [year]. They last travelled there in [year/month] and plan to return there in [year/month]

Make sure to record all other activities and values in this area. See further detailed questions on additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- Why did you use this route?
- What do you do when you are travelling along here?
    - Do you teach younger generations along this route? If so, what do you teach them? (Map as TA)
- How did you learn about this route? Did anyone teach you about it?
- Does this route have a name? In your language?
- What is the farthest point that you have travelled along this route?
- Is this the only route to get from point A to B, or is there an alternative?
- Is this a new route, or a well-travelled, well-recognized route?
- What is this route like (i.e., current condition)?
- Is this route important to you? If so, how/why?
- Can you describe how it makes you feel when you're travelling this route?
- Is this route important to you/your family/community? Why/how so?
- Is this route important for your culture/way of life? How?
- Are there many routes like this one or is this route unique? What makes it unique?
- If this Project were to go ahead, how would that make you feel about travelling this route in the future?

4.3 HUNTING AND TRAPPING

Can you show us places where you have trapped any of the following animals?

- FO = Other Fur Bearer
- FX = Fox
- TP = General Trapping Area
- WO = Wolf
- WV = Wolverine
- WE = Weasel

A mapped trapping area or line can be copied and pasted for each species listed by the participant. Mapped trapping values can be copied as a general trapping area (TP) for mapped polygons and trapline (TL) for mapped linear feature.

Can you show us places where you have shot and killed any of the following TERRESTRIAL animals?

- CA = Caribou
- PZ = Polar Bear
- LM = Lemming
- OG = Other Game
- RB = Arctic Hare

Can you show us places where you have shot and killed any of the following MARINE animals?

- KW = Orca
- DO = Dolphin
- BZ = Bowhead Whale
- BW = Beluga Whale
- PG = Harp Seal
- OR = Walrus
- NW = Narwhal
- MX = Muskox
- MW = Minke Whale
- UJ = Bearded Seal
- RZ = Ringed Seal
- ZA = Other Seals
- ZB = Other whales

Do you hunt birds? If so, can you show us where you have shot and killed any of the following birds?

- FL = Falcon
- GE = Goose
- HA = Hawk
- OB = Other Bird
- SJ = Snowy Owl
- SW = Swan
- RY = Raven
- WM = Sea Birds
- SN = Sandpipers
- PT = Ptarmigan
- PF = Puffin
- OS = Snow Goose
- MZ = Murre
- LO = Loon
- GU = Guillemot
- FA = Fulmar
- EI = Eider

Environmental Feature (EF)

Can you show us the locations of habitats or environmental features that are important for birds/mammals? (E.g., calving or mating areas, mineral licks).

Environmental Feature Corridor (EC)

Can you show us any migration routes or crossings that birds/mammals use to move through the area?

Mark any locations where the participant has hunted but not killed any mammals or birds as an Environmental Feature (EF).

Read the map code aloud for each mapped feature.

Example map code:

PX01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] trapped/shot and killed [species] in the [season/month] of [year] with [name(s)]. [Participant] first hunted/trapped here in [year/month] and last hunted/trapped here in [year/month]. [Participant] accesses this hunting/trapping area by [mode of travel].

Make sure to record all other activities and values in this area. See further detailed questions on additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- Where did you cut up the animal? (Mark as PR)
- Did you share the meat?
- Did you smoke/dry the meat? Where?
- Is hunting/trapping important to you? Why?
- Who taught you how to hunt/trap? Who? Where? (Mark as TA)
- Is it important to teach younger generations how to hunt/trap? Why?
- How many people can [animal species] feed? For how long?
- Does [animal species] have a name in your traditional language?
- Are any of these animals hard to find? Which ones?
- Does this animal have a name in your traditional language?
- What is this area like for hunting/trapping?
- Are there many areas like this to hunt/trap this/these animal(s), or is this area unique? What makes it unique?
- Is/are this/these animal[s] important for your culture/way of life? If so, how/why?
- Can you describe what it is like to be out on the land hunting/trapping?

- If the proposed Project went ahead, how would that make you feel about hunting/trapping in this area in the future?
- How would you explain the importance of these animals to people who do not know/the government/industry?

4.4 FISHING

Can you show us places where you have caught any of the following fish species or shellfish/seaweed?

- DV = Dolly Varden
- OF = Other Fish
- WF = Whitefish
- ZR = Roe (herring)
- ZL = Smelt
- TB = Turbot
- SZ = Shrimp
- PY = Capelin
- PL = Pollock
- PD = Scallop
- LC = Lingcod
- KB = Crab
- HL = Halibut
- HE = Herring
- GS = Greenland Shark
- CR = Char
- CL = Clams
- AM = Mussels
- KE = Kelp/ Seaweed
- SA = Salmon

Mapped fishing areas can be copied and pasted for each species caught by the participant.

Mark any locations where the participant has fished but released the fish or not caught anything as an Environmental Feature (EF).

Read the map code aloud for each mapped feature.

Example map code:

LT01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] caught [species] in the [season/month] of [year] with [name(s)]. [Participant] first fished here in [year/month] and last fished here in [year/month]. [Participant] accesses this fishing area by [mode of travel].

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- What did you do with the fish (meat, e.g., dry it, smoke it, other)? Where?
- Is fishing important to you? Why?
- Who taught you how to fish? Where? (Map as TA)
- Have you taught anyone how to fish? Who? Where? (Map as TA)

- Is it important to teach younger generations how to fish? Why?
- How many people can [fish species] feed? For how long?
- Does [fish species] have a name in your language?
- Are any of these fish hard to find? Which ones?
- What is fishing like in this area?
- Are there many areas like this to fish this/these species, or is this area unique? What makes it unique?
- What does it mean to you to be able to fish?
- Can you describe what it is like to be out on the water fishing? How does it make you feel?
- Are these fish important for your culture/way of life? How?
- If the proposed Project went ahead, how would that make you feel about fishing in this area in the future?
- How would you explain the importance of these fish/fishing to people who do not know/the government/industry?
- If the proposed Project went ahead, how would that make you feel about fishing in this area in the future?

4.5 HARVESTING PLANTS / OTHER RESOURCES

Can you show us places where you've collected any of the following berries, other plants, or other resources?

- BA = Barks (crafts, construction, etc.)
- BE = Berries/Wild Fruit
- DP = Dye Plant
- FP = Food Plant (roots, bulbs, cambium)
- FU = Fungus
- WG = Willow
- FW = Firewood
- MP = Medicine Plant
- ME = Mosses/lichens
- OP = Other Plant
- AP = Aquatic Plant
- EG = Eggs
- EM = Earth Material (rocks, clays, etc.)
- FE = Feathers
- WA = Water (drinking water etc.)

Can you show us places where you've collected plants for crafts or other uses? (E.g., for creating art, building a drying rack, etc.)

Read the map code aloud for each mapped feature.

Example map code:

MP01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] harvested [plant species] in the [season/month] of [year] with [name(s)]. [Participant] first harvested here in [year/month] and last harvested here in [year/month]. [Participant] accesses this harvesting area by [mode of travel]. These harvested items are used for [use].

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- What do you use [medicine* / plants / fungi] for? (*If appropriate to share)
- Is gathering [medicine / plants / fungi] important to you? Why?
- Who taught you how to collect and use [medicine / plants / fungi]? Where? (Map as TA)
- Have you taught anyone about how to collect and use [medicine / plants / fungi]? Who? Where? (Map as TA)

- Is it important to teach younger generations about [medicine / plants / fungi] resources? Why?
- Does [medicine / plant / fungus] have a name in your traditional language?
- Are any of these [medicine / plants / fungi] hard to find? Which ones?
- What is picking/gathering [medicine / plants / fungi] like in this area (i.e., current condition)?
- Are any of these [medicine / plants / fungi] hard to find? Which ones?
- Are there many areas like this to pick [medicine / plants / fungi], or is this area unique? What makes it unique?
- Can you describe what it is like to be out picking/gathering [medicine / plants / fungi]? How does it make you feel?
- Are these medicine/plants/fungi important for your culture/way of life? How?
- If the proposed Project went ahead, how would that make you feel about gathering [medicine / plants / fungi] in this area in the future?
- How would you explain the importance of these [medicine / plants / fungi] to people who do not know/the government/industry?

4.6 OTHER RESOURCES

Can you show us places where you have collected any of the following resources?

- Antlers or sheds [SD]
- Feathers [FE]
- Other materials collected for crafts/crafting [CZ]
- Rocks, clay, vermillion, other earth materials [EM]

Read the map code aloud for each mapped feature.

Example map code:

SD01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] gathered [resource] in the [season/month] of [year] with [name(s)]. [Participant] first gathered here in [year/month] and last gathered here in [year/month]. [Participant] accesses this gathering area by [mode of travel]. These harvested items are used for [use].

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- What do you use these resources for?
- Is collecting these resources important to you? Why?
- Who taught you how to collect these resources? Where? (Map as TA)
- Have you taught anyone about how to collect these resources? Who? Where? (Map as TA)
- Is it important to teach younger generations about these resources? Why?
- Does [resource] have a name in your traditional language?
- Are any of these resources hard to find? Which ones?
- What is collecting resources like in this area (i.e., current condition)?
- Are any of these resources hard to find? Which ones?
- Are there many areas like this to collect resources, or is this area unique?
- Can you describe what it is like to be out collecting resources?
- Are these resources important for your culture/way of life? How?
- If the proposed Project went ahead, how would that make you feel about collecting resources in this area in the future?
- How would you explain the importance of these resources to people who do not know/the government/industry?

4.7 COLLECTION OF WATER (WA)

Can you show us places where you have collected drinking water/ice/snow while out on the land? (E.g., for drinking, cooking, making tea, ceremonies, etc.)

One of the things that is happening with the Mary River Project is that Inuit are getting a greater role in monitoring and management. For example, as part of changes to the Water Compensation Agreement, greater monitoring and higher levels of protection, will be required for specific waterbodies that are identified by Inuit as being of heightened importance in the Project-affected area.

Can you show us any lakes, rivers or creeks that should be considered high Inuit use and values waterbodies?

[If so, for each waterbody] what makes this waterbody important to Inuit?"

Read the map code aloud for each mapped feature.

Example map code:

WA01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] collected water here in the [season/month] of [year] with [name(s)]. [Participant] first collected water here in [year/month] and last collected water here in [year/month]. [Participant] accesses this area by [mode of travel]. [Participant] uses collected water for [purpose].

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- What did you do with the water collected?
- Is the ability to collect water from the land important to you?
- Who taught you about where to collect water in this area? (Map as TA)
- Have you taught anyone about where to collect water in this area? Who? Where? (Map as TA)
- Is it important to teach younger generations about where to collect water? How so?
- What is collecting water like in this area (i.e., current condition)?
- Do you feel safe drinking the water collected from this area?
- Is water that would want to collect hard to find?

- Are there many areas like this to collect water, or is this area unique? What makes it unique?
- Can you describe what it is like to be out collecting water? How does it make you feel?
- Is collecting water important for your culture/way of life? How?
- If the proposed Project went ahead, how would that make you feel about collecting water in this area in the future?
- How would you explain the importance of collecting water in this area to people who do not know/the government/industry?

4.8 ENVIRONMENTAL FEATURES (EF) AND CORRIDORS (EC)

Environmental Feature (EF)

Can you show us the locations of habitat or environmental features that are important for mammals/birds/fish/plants? (E.g., calving or mating areas, denning or overwintering areas, fish spawning areas)?

Environmental Feature Corridor (EC)

Can you show us any migration routes or crossings that animals use to move through the area?

When recording routes and linear features in Google Earth, follow the actual route indicated by the participant and follow natural features. Do not record a straight line from A to B.

Read the map code aloud for each mapped feature.

Example map code:

EF01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] identified this area as an [environmental feature/corridor] for [species] due to [features]. [Participant] learned about this from [name]. [Participant name] last travelled through the area in [month/year].

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- What environmental features (e.g., migration routes / crossings / fish spawning areas) make for good [animal / plant] habitat? Why?
- How did you learn about these environmental features? Where? (Map as TA if taught)
- Have you taught anyone about these environmental features? Who? Where? (Map as TA)
- Is it important to teach younger generations about these environmental features? Why?
- Are any of these features hard to find? Which ones?
- Are there many areas like this with these features, or is this area unique? What makes it unique?

- Have you observed any changes to [migration routes / crossings / fish spawning] areas in this area over your lifetime?
- Are these environmental features important for your culture/way of life? How?
- If the proposed Project went ahead, would it impact animals' use of [migration routes / crossings / fish spawning areas]?
- How would you explain the importance of these features to people who do not know/the government/industry?

4.9 CULTURAL AND INTANGIBLE USES AND VALUES

Gathering Place (GP)

Can you show us important places where your community holds or attends gatherings?

- E.g. Inuit games, drum dancing, celebrations, etc.

Ceremonial Place (CP)

Can you show us places that are used for ceremonies?

Teaching Area (TA)

Can you show us places that are used or have been used for teaching knowledge to children or others?

Can you show us any places that have special knowledge or stories associated with them?

- E.g., Tuniit stories, animal spirit stories, histories, etc.

Burial (BU)

Can you show us places where Inuit people are buried or where their remains are found (e.g., cremation)?

Spirit (SP)

Can you show us places where spirit beings live or where there are special rules about how you act or respect the place?

Place Name (PN)

Can you show us any places with special place names (e.g., in Inuktitut)?

Include place names and translations in Google Earth description field

Read the map code aloud for each mapped feature.

Example map code:

CP01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] has [gathered/attended activity/etc.] here in the [season/month] of [year] with [name(s)]. [Participant] first [gathered/attended activity/etc.] here in [year/month] and last [gathered/attended activity/etc.] here in [year/month]. [Participant]

accesses this area by [mode of travel]. The traditional name for this location is [name], which means [translation].

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- What specifically do you use these places for (e.g., what kinds of ceremonies, what was taught there, what was the story associated with that site)?
- When is the site used? Or when does the event take place?
- Who would use the site (e.g. use by you/ your family members/your community/many communities etc.)?
- Are [gathering places / ceremonial places / teaching areas / burial sites / spiritual locations / place names] important to you? Why?
- Who taught you about this [gathering place / ceremonial place / teaching area / burial site / spiritual location / place name]? (Map as TA)
- Have you taught anyone about [gathering places / ceremonial places / teaching areas / burial sites / spiritual locations / place names]? (Map as TA)
- Is it important to teach younger generations about these [gathering places / ceremonial places / teaching areas / burial sites / spiritual locations / place names]? Why?
- Are these [gathering places / ceremonial places / teaching areas / burial sites / spiritual locations / place names] important to sustaining your culture/way of life?
- Does [gathering place / ceremonial place / teaching area / burial site / spiritual location / place name] have a name in your traditional language?
- What is the [gathering place / ceremonial place / teaching area / burial site / spiritual location / place name] like (i.e., current condition)?
- Have you observed any changes to [gathering places / ceremonial places / teaching areas / burial sites / spiritual locations / place names] in this area over your lifetime?
- Can you describe what it is like to be at [gathering place / ceremonial place / teaching area / burial site / spiritual location / place name]? How does it make you feel?
- Are [gathering places / ceremonial places / teaching areas / burial sites / spiritual locations / place names] important to your culture/way of life? How?
- If the proposed Project went ahead, how would that make you feel about the [gathering place / ceremonial place / teaching area / burial site / spiritual location / place name] in this area?
- How would you explain the importance of these [gathering places / ceremonial places / teaching areas / burial sites / spiritual locations / place names] to people who do not know/the government/industry?

4.10 IMPAIRED USE

Specific Impaired Use (SL)

Can you show us any specific places where you used to [hunt / gather / fish / camp / practice other rights], but cannot anymore? (E.g., from industrial impacts, environmental change or other impacts)

General Impaired Use (GL)

Can you show us any general areas or specific sites where you have experienced degraded habitat for mammals, fish, or plants?

Read the map code aloud for each mapped feature.

Example map code:

GL01*?^$-X01
[ActivityCode][SequenceNumber]Modifier(s)]-[ParticipantID]

Example note:

[Participant name] identified this as a place where they used to [activity]. Use of this place has been impaired due to [reason for loss]. [Participant name] used this area since [month/year] until [month/year].

Make sure to record all other activities and values in this area. See detailed questions for additional values throughout Section 4.

Follow-Up Questions

Use the following questions as prompts to ensure you have a full understanding of why this place is important.

- What activities did you used to do in this [place/area]?
- Why did you first use this area (e.g. hunting because there were lots of caribou)? Why do you continue to use it?
- Why can you no longer use this [place/area]? What has impacted your ability to use that place? What caused the change [be open to responses that identify different cumulative effects causing agents like the main, climate change, more ships, etc.]
- When was the last time you used this [place/area]?
- How often did you go to or use this [place/area]?
- Can you do those activities somewhere else? Why or why not?
- What would need to be fixed/what would need to improve for you to use this place again in the way you would like to?
- How does it make you feel that you can no longer go to or use this place [place/area]?

- Has the loss of use of this place [place/area] impacted [you / your family / your community]?
- Has the loss of use in this place [place/area] impacted your culture/way of life? How?
- How would you explain the importance of this place [place/area] to the government/industry?
- How would you explain the impact of not being able to use the place [place/area] to people who do not know/the government/industry?
- If the proposed Project went ahead, how would that make you feel about this place [place/area]?

4.11 KNOWLEDGE OF USE BY OTHER COMMUNITY MEMBERS

*After you have covered a participant's personal use, and if there is still time, you may want to ask about their knowledge of how other community members use the area. You may do this particularly for important areas, if the participant does not have much personal experience of an area, or if you are trying to collect historical use data. (Map with *)*

Can you show us places where members of your family or community or ancestors have camped or stayed in cabins?

Can you show us places where members of your family or community or your ancestors have killed or trapped animals or birds?

Can you show us places where members of your family or community or your ancestors have caught fish?

Can you show us places where members of your family or community or ancestors have collected [berries / plants / water / etc.]?

Can you show us places where members of your family or community or your ancestors have attended ceremonies, or gatherings?

Can you show us places where members of your family or community or your ancestors have travelled across the area?

For follow-up questions, please refer to the relevant part of Section 4 above.

4.12 PROJECT IMPACT QUESTIONS

Make sure industry data and the participant's mapped sites are on the screen.

Refer back to the participant's use in the Study Area, e.g. if they do a lot of fishing.

Baffinland's Mary River Iron Mine Project includes the following primary project components:

- A tote road and railway corridor with associated crossings, infrastructure and traffic
- A port facility and associated refueling, processing, loading and unloading and shipping traffic
- An active open pit iron mine with associated excavations

Ask the following questions for each of the above Project Components (depending on the participant's previous responses – e.g. if an avid seal hunter consider focusing on port and shipping facilities and routes)

Use the following as a tool to order these responses and guide future questioning – notably when asking about project interactions, and impact pathways:

Based on your understanding of the Project, do you think it will affect:

- Your (hunting/fishing/access to the land/sense of place)?
    - If so, how?
- Would these occurrences impact you directly or indirectly?
    - Is the impact displaced (e.g. are there other animals/features of the landscape they will impact)?

Are impacts seasonal?

Do you think these impacts will extend beyond the life of the project? Why?

Will these impacts extend to other community members?

    - Who will feel them?

The above process describes the sorts of information around projected impacts and pathways that we are attempting to solicit from the interview participant. It is important to ask probing questions that solicit opinions and experiences without leading the interview participant.

Do ask: What do you think will happen? Why? How will it impact you?

Don't ask: Will (x, y, z) happen?

Do you have any ideas about how to avoid, reduce or compensate for any of the impacts you have identified?

What do you think the most important issues are for your community to focus on in relation to the proposed Project?

Are there any other important places or issues related to the Project that you think we should be documenting today?

Are there other community members that we should talk to?

Note: You may want to ask some of these questions earlier in the interview, for example if a participant has talked a lot about caribou hunting in the Study Area, ask them if they think the Project will impact their hunting, and why.

4.13 CUMULATIVE EFFECTS

Are there other human-caused changes from sources other than the Mary River Project that are contributing to changes you are seeing? Or impacting the environment?

- What sorts of changes?
- What do you think is causing these changes?
- Where have you noticed changes?
- When did you begin to notice these changes taking place [When was this benchmark?]

What are they and how are they impacting the environment? How might these human activities change the environment?

Do you think these changes to the environment will impact Inuit use of the land?

Do you think any of these environmental changes, when combined with the effects of the Mary River Mine, will make impacts on Inuit culture, resources and land use and the environment better or worse than if they happened on their own? Which ones and in what way?

Are there any human activities or changes that you expect will make the effects of the Mary River Mine better or worse for Inuit culture, resources and land use than if they happened on their own? Which ones and in what way?

Think of all the potential and ongoing effects from human activities on Inuit culture, resources and land use, including from the Mary River Mine. Can you describe how water and fishing might change over the life of the mine compared to today?

4.14 SENSE OF PLACE

Ask the following questions in relation to territory in general, the Study Area and/or other areas identified as important by the participant during the interview. Use these questions to ensure you have a full understanding of why each place is important.

Do you feel connected to the land in this area?

- If yes, why do you feel connected to this place?
- How does it make you feel to be out on the land in this area?

Is this place important to your identity? If so, how?

Can you describe what it is like to spend time at your favourite places out on the land?

Is there anything special about these places? What and why?

5. CONCLUSION

Read with audio & video recorders on after every session.

Today is [date]. We have just finished interviewing [participant name] for the Qikiqtani Inuit Association knowledge and use study of Baffinland's Mary River Iron Mine Project. Thank you for coming.

My name is [name], my co-researcher(s) is/are [name(s)] and we are here at [office/building] in [community/town]. We've given [participant name] participant ID [#]. We've mapped a total of [#] sites in Google Earth at 1:50,000 or better, and recorded a total of [#] tracks on the digital recorder. Notes are recorded in/on [notebook/computer]. This interview has taken approximately [#] hours [#] minutes.

MAPPING NOTES

Map all points, lines and polygons at an eye height of approximately 10 km or less (1:50,000 or better).

Label each site consistently in the **name field** of the site properties dialogue box.

Each code should indicate:

- Site use;
- Site number;
- Modifiers (if relevant); and
- Source (participant ID).

Modifiers (after the site number):

- First-hand knowledge has no modifier (e.g., TX01-P08; member with ID P08 reports temporary shelter where she has camped).
- Second-hand knowledge is mapped with a * (e.g., TX01*-P08).
- Approximate spatial information is mapped with a ? (e.g., TX01?-P08).
- If the participant was present but did not take part in an activity, map with a + (e.g., BE01+-P08).
- Commercial use (including guiding/outfitting) is mapped with a $ (e.g., TX01$-P08).
- If multiple modifiers are used, a code could look like, e.g., TX01*?$-P08.

All other information goes in the **description field** of the dialogue box.

Transportation routes and all linear features should be controlled.

- Zoomed in to less than 10 km eye-height; and
- Follow the actual route and natural features (i.e., not a straight line from A to B).

Include in the **description field** of the dialogue box in Google Earth for each mapped site:

- First and last use (i.e., day / month / season and year / decade);
- Frequency of use;
- Species (if relevant);
- Number and names of members who were present; and
- Any additional information you are told.

Other:

- Keep list of place names;
- Spell out proper names and place names where possible for the recording; and
- Use prompts to gain detailed access and use information.

MAPPING CODES - QIA

HABITATION AND TRANSPORTATION

PX = Permanent Habitation
TR = Trail
TX = Temporary Habitation (including resting places, whaling spotting stations)
WR = Water Route
DX = Boat launch/mooring
BP = Birth Place

ENVIRONMENTAL FEATURES

EC = Environmental Feature Corridor (e.g.caribou migration trails)
EF = Environmental Feature
WR = Winter Range
WQ = Polynya
VS = Visual Sighting
SF = Spawning Area
HF = Habitat Feature
DN = Den/ Nest Location
CV = Calving Area
ZC = Ice lead
ZD = Floe Edge
ZK = Breathing holes (seals)

TERRESTRIAL MAMMAL KILL SITES

CA = Caribou
PZ = Polar Bear
LM = Lemming
OG = Other Game
RB = Arctic Hare

MARINE MAMMAL KILL SITES

KW = Orca
DO = Dolphin
BZ = Bowhead Whale
BW = Beluga Whale
PG = Harp Seal
OR = Walrus
NW = Narwhal
MX = Muskox
MW = Minke Whale
UJ = Bearded Seal
RZ = Ringed Seal
ZA = Other Seals
ZB = Other whales

FURBEARING KILL SITES

FO = Other Fur Bearer
FX = Fox
TP = General Trapping Area
WO = Wolf
WV = Wolverine
WE = Weasel

BIRD KILL SITES

FL = Falcon
GE = Goose
HA = Hawk
OB = Other Bird
SJ = Snowy Owl
SW = Swan
RY = Raven
WM = Sea Birds
SN = Sandpipers
PT = Ptarmigan
PF = Puffin
OS = Snow Goose
MZ = Murre
LO = Loon
GU = Guillemot
FA = Fulmar
EI = Eider

FISH CATCH SITES

DV = Dolly Varden
OF = Other Fish
WF = Whitefish
ZR = Roe (herring)
ZL = Smelt
TB = Turbot
SZ = Shrimp
PY = Capelin
PL = Pollock
PD = Scallop
LC = Lingcod
KB = Crab
HL = Halibut
HE = Herring
GS = Greenland Shark
CR = Char
CL = Clams
AM = Mussels
KE = Kelp/ Seaweed
SA = Salmon

PLANTS & OTHER RESOURCES

BA = Barks (crafts, construction, etc.)
BE = Berries/Wild Fruit
DP = Dye Plant
FP = Food Plant (roots, bulbs, cambium)
FU = Fungus
WG = Willow
FW = Firewood
MP = Medicine Plant
ME = Mosses/lichens
OP = Other Plant
AP = Aquatic Plant
EG = Eggs
EM = Earth Material (rocks, clays, etc.)
FE = Feathers
WA = Water (drinking water etc.)

CULTURAL USE

BU = Burial
BP = Birthplace
CP = Ceremonial Place
DR = Drying Rack
PN = Place Name
SP = Spirit
TA = Teaching Area
PR = Processing meat/hides
HR = Heritage Resource
GP = Gathering Place
FS = Food Storage (cache)
ZX = Fermenting Site (*Igunnaq*)

IMPAIRED USE

GL = General Loss
SL = Specific Loss

APPENDIX 4: CURRICULUM VITAE

Rachel Olson, PhD

E-mail: rachel.olson@thefirelightgroup.com

EDUCATION

Doctor of Philosophy in Social Anthropology, University of Sussex, Brighton, UK, 2013

Master of Research in Social Anthropology, Ethnology and Cultural History with Distinction, University of Aberdeen, Scotland, UK, 2003

Bachelor of Arts in Anthropology with Distinction, University of Alberta, Edmonton, AB, 1999

EXPERT EXPERIENCE

Current member of the Expert Panel on Integrated Natural Resource Management for the Council of Canadian Academies. Feb 2017-present.

Expert and co-author of the Joint Expert Report on behalf of Buffalo River Dene Nation for the Department of Justice's Primose Lake Air Weapons range. January 2017-present.

Expert testimony on behalf of Saulteau First Nations at the National Energy Board hearings for the TransCanada North Montney Mainline hearings. 2015.

Expert testimony on behalf of the Tlicho Government at the Mackenzie Valley

Environmental Impact Review Board for Fortune Minerals NICO Project hearing. 2013.

EMPLOYMENT HISTORY

The Firelight Group – North Vancouver, BC

President (2015 to Present) and Director (2009 to Present)

Responsible, as co-founder and director, for helping establish The Firelight Group, a firm of aboriginal and non-aboriginal professionals specialized in providing respectful and respected environmental and social science research, consulting, and support services in processes where aboriginal and non-aboriginal interests interact, and where good relationships are desired by all sides. Tasks include business development, as well as design, development, and delivery of technical services including community-based traditional knowledge research and documentation systems, environmental and socio-cultural impact assessments and monitoring programs, Indigenous land use mapping, GIS technical support and training, archival research, community involvement processes, and First Nations consultation support services.

National Aboriginal Health Organization – Ottawa, ON

Research Officer (2007 to 2008)

As a member of the First Nations Centre research team, my primary research areas were the topics of maternity care and environmental health. Also held the research proposal development and workshop development files. Tasks included primary research, technical writing, and participating in various committees and workshops across Canada. Was primary author of NAHO's series entitled, "Celebrating Birth".

United Nations Educational, Scientific and Cultural Organization - Paris, France

Consultant (2006-2007)

Worked with the LINKS (Local and Indigenous Knowledge Systems) program in the Science Sector and facilitated ongoing projects with Indigenous communities in New Zealand, Micronesia, and Central America. Also focused on proposal development and editing and publishing various LINKS documents, including edited volumes.

School of Nursing Research, University of British Columbia – Vancouver, BC

Social Science Researcher (2004-2005)

Position of Health Research Associate for the research project, "Access to Primary Care Services for Aboriginal People in an Urban Centre." Duties include literature reviews, project coordination, and data collection, including participant observation of an Emergency Department, and in-depth interviews with aboriginal patients and health professionals.

Ecotrust Canada – Vancouver, BC

Aboriginal Mapping Network Coordinator (2003-2004)

Managed the Aboriginal Mapping Network program by meeting and engaging with like-minded individuals and organizations at various conferences and workshops. Coordinated of over 120 aboriginal mapping professionals from across North America, Malaysia and Panama for the "Mapping for Communities: First Nations, GIS and the Big Picture" conference, held on November 20-21, 2003 in Duncan, BC. Conducted a comprehensive evaluation of the Aboriginal Mapping Network.

Dene Tha' First Nation - Chateh, AB

Data Collection Manager (2001 to 2003)

Developed and implemented Traditional Use Study in two First Nations communities, Chateh and Meander River. Included developing research design, methodology, training community researchers, and reporting to the Steering Committee of the Dene Tha' Consultation Pilot Project.

Treaty 8 Tribal Association - Fort St. John, BC

Interview Coordinator (1999-2000)

Coordinated land use mapping and life history interviews with community researchers in two communities, Halfway River and Doig River, focusing on qualitative methods and mapping processes.

PROJECT EXPERIENCE – TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK) AND TRADITIONAL USE STUDIES (TUS)

- Lead Author and Principal Investigator for the ***Ochiichagwe'babigo'ining Ojibway Nation*** *Knowledge and Use Scoping Study for TransCanada Pipelines Ltd.'s Proposed Energy East Project*.

- Lead Author and Principal Investigator for the ***Shoal Lake #40 First Nation*** *Knowledge and Use Scoping Study for TransCanada Pipelines Ltd.'s Proposed Energy East Project*.

- Lead Author and Principal Investigator for the ***Blueberry River First Nation*** *Knowledge and Use Study for BC Hydro's proposed Peace Region Electricity Supply (PRES) project*.

- Lead Author and Principal Investigator for the ***Eabametoong First Nation*** *Knowledge and Use Scoping Study for Greenstone Gold Mines GP Inc.'s Proposed Hardrock Project*.

- Lead Author and Principal Investigator for the ***Eabametoong First Nation*** *Knowledge and Use Desktop for Wataynikaneyap Power's Proposed Transmission Project*.

- Lead Author and Principal Investigator for the ***McLeod Lake Indian Band*** *Knowledge and Use Study for BC Hydro's proposed Peace Region Electricity Supply (PRES) project*.

- Lead Author and Principal Investigator for the ***Canadian Environmental Assessment Agency's*** *Framework for the Consideration and Integration of Indigenous Traditional Knowledge in Federal Environmental Assessment* project.

- Lead Author and Principal Investigator for the ***Musqueam Indian Band*** *Marine Shipping Effects Assessment Study for Port Metro Vancouver's proposed Roberts Bank Terminal 2 project*.

- Lead Author and Principal Investigator for the ***Nadleh Whut'en First Nation*** *Knowledge and Use Study for New Gold's proposed Blackwater Gold project*.

- Lead Author and Principal Investigator for the ***Paddle Prairie Métis Settlement*** *Knowledge and Use Study specific to TransCanada Pipelines Ltd.'s Proposed*

2017 NGTL System Expansion project.

- Lead Author and Principal Investigator for the ***Brunswick House, Chapleau Cree and Chapleau Ojibwe First Nations*** *Knowledge and Use Study for the proposed Goldcorp Borden Gold project*.

- Lead Author and Principal Investigator for the ***Blueberry River First Nation (BRFN)*** *Knowledge and Use Study for the Shell Canada's proposed and existing developments project*.

- Lead Author and Principal Investigator for the ***Mattagami First Nation (MFN)*** *Traditional Knowledge and Use Study for Canadian National Railway's Two Train Derailments*.

- Lead Author and Principal Investigator for the ***T'Sou-ke Nation's*** *Traditional Marine Knowledge and Use Study (TUS) for the Kinder Morgan's proposed Trans Mountain Pipeline Expansion project*.

- Lead Author and Principal Investigator for the ***Shackan Indian Band*** *Knowledge and Use Study (TUS) for the Kinder Morgan's proposed Trans Mountain Pipeline Expansion project*.

- Lead Author and Principal Investigator for the ***Wabun Tribal Council*** *Knowledge and Use Study for the proposed TransCanada Energy East Pipeline project*.

- Lead Author and Principal Investigator for the ***Eabametoong First Nation*** *Knowledge and Use Study*.

- Lead Author and Principal Investigator for the ***Samson Cree Nation*** *Knowledge and Use Study for the Enbridge's proposed Edmonton to Hardisty (E2H) pipeline project*.

- Lead Author and Principal Investigator for the ***Peter's Band*** *Traditional Use Study (TUS) for the Kinder Morgan's proposed Trans Mountain Pipeline Expansion project*.

- Lead Author and Principal Investigator for the ***Blueberry River First Nations*** *Knowledge and Use Study for the proposed TransCanada Merrick Mainline project*.

- Lead Author and Principal Investigator for the ***Blueberry River First Nations*** *Knowledge and Use Study for the proposed TransCanada North Montney Mainline project.*

- Lead Author and Principal Investigator for the ***Mikisew Cree First Nation*** *Knowledge and Use Study for the proposed Athabasca Oil Hangingstone SAGD*

Expansion project.

- Lead Author and Principal Investigator for the ***Blueberry River First Nations*** *Knowledge and Use Study for the proposed TransCanada Prince Rupert Gas Transmission project*.

- Lead Author and Principal Investigator for the ***Saulteau First Nations*** *knowledge and use review for TransCanada's proposed North Montney Mainline Project*.

- Lead Author and Principal Investigator for the ***McLeod Lake Indian Band*** *Knowledge and Use Study for EDF Taylor Wind Farm*.

- Lead Author and Principal Investigator for the ***McLeod Lake Indian Band*** *Knowledge and Use Study for EDF Sundance Wind Farm*.

- Lead Author and Principal Investigator for the ***McLeod Lake Indian Band*** *Knowledge and Use Study for Glencore Xstrata Sukunka Coal Mine*.

- Lead Author and Principal Investigator for the ***Saulteau First Nations*** *knowledge and use study for 3 proposed pipeline projects: TransCanada's proposed Coastal GasLink and Prince Rupert Gas Transmission projects, and Spectra's proposed Westcoast Connector pipeline project*.

- Lead Author and Principal Investigator for the ***Saulteau First Nations*** *knowledge and use study for 4 wind energy projects: EDF Taylor, EDF Sundance, Boralex/Aeolis Babcock Creek Ridge, and Boralex/Aeolis Moose Lake Ridge wind projects.*

- Lead Author and Principal Investigator for the ***Saulteau First Nations*** *knowledge and use study for HD Mining International Ltd.'s proposed Murray River Coal Mine project.*

- Lead Author and Principal Investigator for the ***Big Grassy River First Nation*** *Knowledge and Use Study for the proposed New Gold Mine Project.*

- Lead Author and Principal Investigator for the ***Blueberry River First Nations*** *Knowledge and Use Study for the proposed TransCanada Coastal GasLink pipeline project.*

- Lead Author and Principal Investigator for the ***Buffalo River Dene Nation*** *joint expert Report for the Primose Lake Air Weapons Range in Saskatchewan.*

- Co-author and Principal Investigator for the ***Doig River First Nation*** *TransCanada - Aitken Pipeline traditional use study.*

- Lead Author and Principal Investigator for the ***Mathias Colomb Cree Nation***

Initial Knowledge and Use Scoping and Mapping Study for three properties belonging to Hudbay Minerals.

- Lead Author and Principal Investigator for the ***Tlicho Government*** *Indigenous knowledge study for the Fortune Minerals NICO project.*

- Senior Researcher for the ***Mikisew Cree First Nation*** *coordinated Indigenous Knowledge (IK) study for the Athabasca oil sands region.*

- Senior Researcher for the ***Athabasca Chipewyan First Nation*** *coordinated Indigenous knowledge (IK) study for the Athabasca oil sands region.*

- Senior Researcher for the ***Treaty 8 Tribal Association*** *Traditional Knowledge, Use and Occupancy Study for the Proposed 'Site C' Area along the Peace River.*

- Senior Researcher for the ***Mikisew Cree First Nation*** *Indigenous Knowledge study for assessing Shell-specific oil sands development projects near Fort McKay.*

- Senior Researcher for the ***Mikisew Cree First Nation*** *use and interests assessment for Shell's Jackpine Mine Expansion project and Pierre River Mine project.*

- Senior Researcher for the ***Athabasca Chipewyan First Nation*** *TEK/TUS project involving documentation of community use and interests assessment for the Total Jocelyn Oil Sands Mining project near Fort McKay.*

- Senior Researcher for the ***Ktunaxa Nation Council*** *TEK/TUS component of an environmental impact assessment for Teck Coal`s proposed mining project.*

- Senior Researcher for ***UNESCO-LINKS*** project, and coordinated the Maori language version of the CD-ROM project, *The Canoe is the People, entitled He Waka He Tangata.*

- Senior Research Manager for the ***Dene Tha' Nation***, and developed and implemented Traditional Use Study in two First Nations communities, Chateh and Meander River. Included developing research design, methodology, training community researchers, and reporting to the Steering Committee of the Dene Tha' Consultation Pilot Project.

- Senior Researcher for ***Halfway River First Nation***, coordinated land use mapping and life history interviews with community researchers. Included training in qualitative methodologies and mapping processes.

- Researcher for ***Tr'ondek Hwech'in First Nation***, Oral History Project focused on collecting life history interviews with elders, and stories of life in fish camps

along the Yukon River.

PROJECT EXPERIENCE – HEALTH AND SOCIAL

- Lead Author and Principal Investigator for the ***First Nations Health Authority*** Nutrition Service Delivery Model for the Northern region of FNHA.

- Lead Author and Principal Investigator for the ***Community Midwives Association of Yukon*** ethno-historical study of midwifery and maternal health care in First Nations community in the Yukon Territory.

- Lead Author and Principal Investigator for the ***Shanti Uganda*** Propelling Motherhood project, a rural-based health intervention using mobile health data collection methods.

- Lead Author and Principal Investigator for the ***Manitoba First Nations Education Resource Centre***, for the development of community-based evaluation of the Family Literacy programs on First Nation reserves in Manitoba.

- Lead Author and Principal Investigator for *the* ***National Aboriginal Council of Midwives*** reports, toolkits, and various other resources*.*

- Lead Author and Principal Investigator for the ***National Aboriginal Health Organization*** Celebrating Birth series on maternal health.

- Senior Researcher for ***Opaskwayak Cree Nation***, conducting of interviews for a qualitative study on mother's experiences of childbirth from a northern Manitoban community.

- Senior Researcher for the ***Red Road HIV/AIDS Network*** for the "Mapping the Road to Healthier Communities Project".

- Senior Researcher for the ***Mother Saradadevi Social Service Society***, conducted a baseline survey of youth and sexual health issues to aid in the development and implementation of prevention programmes in the district.

SELECTED PUBLICATIONS- TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK) AND TRADITIONAL USE STUDIES (TUS)

Peer Reviewed

Olson, Rachel, Jeffrey Hackett, and Steven DeRoy. (2016) Mapping the Digital Terrain: Towards Indigenous Geographic Information and Spatial Data Quality Indicators for Indigenous Knowledge and Traditional Land-Use Data Collection. The Cartographic Journal.

Corbett J. M., Giacomo Rambaldi, Peter A. Kwaku Kyem, Daniel Weiner, Rachel Olson,

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Guest Editor. Bloodlines Magazine. Issue 5: Spring 2005. Red Road HIV/AIDS Network Society. West Vancouver, BC.

CONFERENCES AND WORKSHOPS

Keynote Presenter, 2017 Indigenous Mapping Workshop, October 2017 in Winnipeg, Manitoba.

Paper presentation, Normal Birth and Labour Conference, October 2017 in Grange-Over-Sands, UK.

Presentation, Centre for Reproduction, Technology and Health at the University of Sussex, Brighton, UK.

Presenter, 2016 Indigenous Mapping Workshop, October 2016 in Vancouver, British Columbia.

Keynote Presenter, 2015 Indigenous Mapping Workshop, July 28-30, 2015 in Waterloo, Ontario.

Paper presentation. International Congress of Midwives Conference, July 2015 in Prague, Czech Republic.

Plenary presentation. Canadian Association of Midwives Annual Conference. Ottawa, Canada. November 7th, 2013.

Paper presentation. Annual Conference of the Canadian Association of Social and Cultural Anthropologists. May 8th, 2013. University of Victoria, Victoria, B.C.

Paper presentation, Uncertainty and Disquiet: 12th European Association of Social Anthropologists Association. Paris, France, July, 2012.

Presenter, Workshop on Indigenous Mapping and Cartography. United Nations Educational, Scientific and Cultural Organization, Paris, France, November, 2007.

Keynote Presenter, Mapping for Change, September 7 – 11, 2005 in Nairobi, Kenya, Africa

Participant of Strategic Planning Sessions, ESRI International User Conference, July 2004 in San Diego, California

Paper presentation, Indigenous Communities Mapping Initiative Conference, March 10 – 15, 2004 in Vancouver, British Columbia

Paper presentation, Breaking the Ice: Transcending Borders through Collaboration and Interdisciplinary Research, 7th ACUNS Student Conference on Northern Studies, October 24-26, 2003 at the University of Alberta, Edmonton, Alberta

OTHER INFORMATION

Research Associate at the Centre for Cultures of Reproduction, Technology and Health at the University of Sussex, United Kingdom.

Received the 2009 Scientific Director's Award for excellence in Aboriginal Health Research at the Graduate level from CIHR- Institute of Aboriginal Peoples' Health.

Honourable Mention. Council for Anthropology and Reproduction Graduate Student Paper Prize. 2012.

Registered member of the Tr'ondek Hwech'in First Nation.