IQALUKTUUTIAQ, NUNAVUT CAMBRIDGE BAY, NUNAVUT





UBLUIRVIA 2023 DECEMBER 2023 Qanurilningit nunagijaujumi naunaijautit avataujumi nalautaarninignik aturningit ihariagijainiklu Results of a community survey on environmental forecasting uses and needs

NUNALAANI QAUJIHAINIKKUT TUTQIKHAIJIT: LOCAL RESEARCH COORDINATORS:

BRENT NAKASHOOK CANDICE SUDLOVENICK SHAWN MARRIOTT

Full Inuktitut/English bilingual report will be available in February 2024 at:

https://straightupnorth.ca/community-wwicuses-and-needs/

UNNIUDJUTIT UPALUNGAIYAQTAIT UKUA: REPORT PREPARED BY:

NATALIE CARTER, CHARLOTTE BUTTLE,
GITA LJUBICIC, REGENA SINCLAIR,
EMMELIE PAQUETTE





Quana

Ilitarijumajaqqut una **27 Ekaluktutiarmiut** kitkut ilauyut uvani naunaijautainik qitqani Ubluqtuhirvia 2020 unalu Tattiarnaqtuq 2022.

Quana tamaffi havakpakkamikik uqautigiplugitlu atuqpakhimajatik.

Aaron Pedersen
Angulalik Pedersen
Brent Nakashook
Cathryn Epp
George Naikak Hakongak
Roland Emingak

Unalu 21 Ekaluktutiarmiut kitkut apiqhivaktut atirmingnik titiraqujingittutik

Una havaakhaq maniliqtuqtauhimajuq ukunannga ArcticNet, Hilaup Aadlangurninnganut Upalungaijarniq uumani Ukiuqtaqtumi Pinahuaruti (CIRNAC), Kanatami Qaujihainikkut Ikhivautalik pinahuaruti, unalu Avatiliqijitkut Hilaup Aalannguqtirninga Kanadami (ECCC) Nalunaqtunik Naunaijaidjutikhanik imaalu Qaritaujaliqinikkut Branch. Una havaakhaq angirutiqaqhimajuq ilagijainik Ukiunga Polar Prediction.





Crown-Indigenous Relations and Northern Affairs Canada



CANADA RESEARCH CHAIRS
CHAIRES DE RECHERCHE DU CANADA



Environment and Climate Change Canada



Pivakhimajugut anginirmik ikajuutikharnik talvanga qaujhainikkut havaqatigiiktut talvani SmartICE, Ukiuqtaqtumi Inirnikhat Katimajiit, Ittaq Ilitquhiliqijunik ualu Qaujihainikkut Havagvingat, Avatiliqijitkut Hilaup Aalannguqtirninga Kanatami, Carleton University, Memorial University Newfoundland, unalulliharvikyuanga Ottawa-mi. Qujagijumajaqqut Aqqiumavvik Katimajiit havaktiit nunaani Arviat ikajuutainun ihuaqhainirmun naunaijautimik hulilukaarutikhainik tamainni Nunavunmi.

















Environment and Climate Change Canada



Quana

We wish to acknowledge the **27 Ekaluktutiarmiut** who participated in this survey between January 2020 and October 2022. Thanks to everyone for their time and sharing their experiences.

Aaron Pedersen
Angulalik Pedersen
Brent Nakashook
Cathryn Epp
George Naikak Hakongak
Roland Emingak

And 21 Ekaluktutiarmiut who asked to remain anonymous.

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Crown-Indigenous Relations and Northern Affairs Canada





Environment and Climate Change Canada



We received tremendous support from our research partners at <u>SmartICE</u>, <u>Arctic Eider Society</u>, <u>Ittaq Heritage and Research Centre</u>, <u>Environment and Climate Change Canada</u>, <u>Carleton University</u>, <u>Memorial University of Newfoundland</u>, and <u>University of Ottawa</u>. We would especially like to thank <u>Aqqiumavvik Society</u> staff in Arviat for their support in coordinating survey activities across Nunavut.













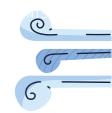




Environment and Climate Change Canada



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02	Havaqatigiiktut Nunallaat	25	Naunaijaqpaktait Aullaaqtinnatik Naunaiqhivikhatik Atuqtakhat Atuqtaujut Aullaariamingni
03	Havaakhalluat Hulilukaarutit	26	Uqaqatigivaktait Nunallaani NaunaiqhivikhatikAtuqtakhat
04	Naunaijautit Iniqtauvikhat atuqtilugu Qalarjuarniq-19 Aanniarutirjuaq	28	Uqarvigiplugit Aallat Ikajuqtikhamingnik
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Piksa: Gita Ljubicic

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Photo: Gita Ljubicic

TALVUUNA UNA HAVAAKHAKKUT

Qaujihainikkut havaqatigiiktut ilauyut Inuit, ukiuqtaqtumi, hivuraanilu qaujihaijit havaqatigiiktut amigaituni ukiuni Nunavunmi nunallaani. Avatqumajuni ukiuni tuhaajugut Nunavunmiunit (Inuit Nunavunmi) tapkua kivgaqtuutit tunihijut kangiqhidjutinik hilakkut, imakkut, uvalu hikukkut qanuriniit ajungnaingitut aturiangani, pijaarnikkut, uvaluuniin kangiqhidjutikhanik. Tuhaavaktugutlu tapkua naunaiqhitikhat ihuarluangittut nunallaani qanuriniinik. Una, ukualu hilarluktaaliqtuq atauttikkuqhivaliqhuni, uvalu aallanguqpaliqtut tariup hikua, ajungnaqhitivaktuq uvalu qajangnaqhitijuq Nunavunmiunun anguniarnikkut uvalu aullaarnikkut qajangnaqhivaliqtuq. Havaktaqqut una havaakhaq ajuirjumapluta qanuqtut Nunavunmiutat atuqpakhimajait avatiliqinikkut naunaitkutikhat ihumaliuriangani qajangnairutikharnik aullaarnirmik nunami (ilauyut imakkut hikukkutlu)

Tikinahuarutivut ikajuutikhat ihuaqhijuumirutikhat naunaitkutikhat hailijut,

uvalu qanuq tuhaqtitauvaktut ukiuqtaqtumi nunallaani. Iniqtiriangani una tikinahuarut, havaktavut naunaijautit pijaangini kiudjutikhainik nunallaanin tamaini Nunavunmi. Naunaijautit apiqutit piliuqtavut havaqatigiikhuta ihumagijainik tamainin havaqatigiiktunut ilauyut, talvangalu avatiliqinikkut ikajuktiujut, Inuit timiqutingit, ukiuqtaqtumi kavamangit qaujhainikkutlu timiqutingit

Havaqatigiiktugut maliqaplugit Aajiiqatigingniq qaujihainikkut havauhikhat,

naunaiqtauhimajut ukunanga Aqqiumavvik Katimajiit havaqatigiplugit Inirnikhaat tamainnit Nunavunmit. Una havagut maliktakhait qanuq ihumaliurutigijavut, piliurnirmiklu angiqatigingnirmik qaujiharnikkut atuqtakhavut qanurinnitlu. Naunaijautit havaktauvaktut tapkunanga Nunalaani Qaujiharnikkut Tutqikhaijiit havakhimaaqtun nunamingni. Havaqatigiikhutalu malrungni havaqatigiiktukharnik naunaijautit ajuiqhaqatigiikhutik naunaijaijaangat naunaijautit naunairutingnik ihumaliurianganiklu naunaitunik tuhaqtitaujukhanik ikajuutikhanik tunihimaaqtunik Nunavunmi nunallani.

Talvalluarli, qanuriniit una
havaakhaq ikajuutauniaqtuq
kivraqtuijunut
ihumaliuqpaktunutlu
naunaiqhittiarlutik ihuatqijanik
nalaumajuniklu Nunavunmiunut,
ikajurlutik aanniqtailinikkut
aullaariangini.



Havaqatigiingniikkut naunaijautit ajuiqhaqatigiiktut nunaani Arviat, Nunavut

(Tattiarnaqtuq 2021, piksa: Gita Ljubicic)

ABOUT THIS PROJECT

Our research team includes Inuit, northern, and southern researchers who have worked together for many years in Nunavut communities. Over the years we have heard that services providing information on weather, water, and ice conditions are not easy to use, access, or understand. We have also heard that the information is not always accurate for local conditions. We developed this project to learn how Nunavummiut (people of Nunavut) are using environmental information to make decisions about safe travel on the land (including water and ice).

Our goal is to help improve the information that is available, and how it is communicated in northern communities. To accomplish this goal, we created a survey to get feedback from communities across Nunavut. Survey questions were developed together with input from all team members, as well as from environmental service providers, Inuit organizations, and northern governments and research organizations.

We work together according to the Aajiiqatigingniq research framework, outlined by the Aqqiumavvik Society working with Elders from across Nunavut. This framework guides how we make decisions, and build consensus on our research approach and results. Surveys were facilitated by Local Research Coordinators working in their home communities. We also worked together to interpret survey results and decide on key messages for service providers and for Nunavut communities.

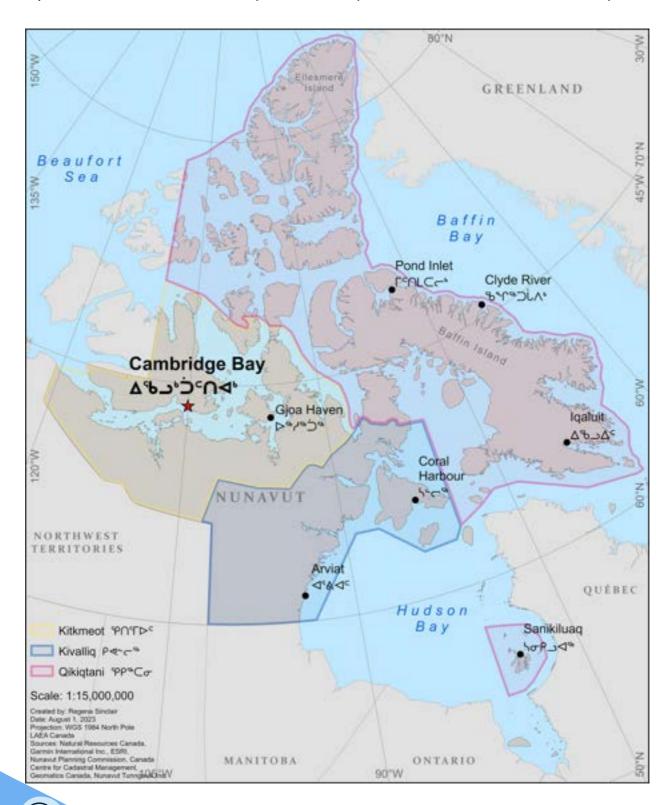
Ultimately, we hope that the results of this project will help service providers and decision-makers make their information more relevant and accurate for Nunavummiut, in support of safe travel.

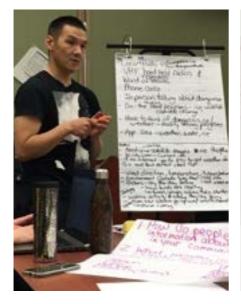


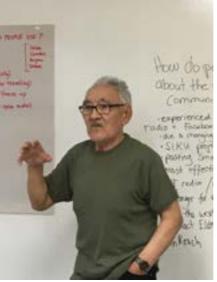
Collaborative analysis workshop in Arviat, Nunavut (October 2021, photo: Gita Ljubicic)

HAVAQATIGIIKTUT NUNALLAAT PARTNER COMMUNITIES

Havaakhaq ilauyut 8 nunallaani Nunavunmi: Arviat, Iqaluktuuttiaq, Kangiqtugaapik, Salliq, Uqhuqtuuq, Iqaluit, Mittimatalik, unalu Sanikiluaq.
Our project involved 8 communities in Nunavut: Arviat, Cambridge Bay, Clyde River, Coral Harbour, Gjoa Haven, Iqaluit, Pond Inlet, and Sanikiluaq.













Photos: Natalie Carter and Gita Ljubicic

Training and collaborative analysis workshops with Local Research Coordinators, Elder mentors, and project partners between October 2019 and December 2022.

HAVAAKHALLUAT HULILUKAARUTIT (2018 - 2022)

Kiqliqhaqaqtut	Hulilukaarutikhat		
Ubluirvia 2018	 chavaqatigiingniikkut havaakhat upalungaijaijut katimadjutaini uvani ArcticNet katimarjuarutaini Ottawa, Ontario 		
Ubluqtuhirvia – Hikutirvia 2019	 (ilaublugit havaakhat tukhiutit havaqatigiiktut, Nunalaani Qaujiharnikkut Tutqikhaijiit, uvalu qaffit hilataani ihivriuqtit)(ilaublugit havaakhat tukhiutit havaqatigiiktut, Nunalaani Qaujiharnikkut Tutqikhaijiit, uvalu qaffit hilataani ihivriuqtit) una pidjutaujuq naunaijainikkut apiqqutit, tainikkut, uvalu atugakhait naunaittut, ihuaqtut, uvalu pijuminaqtunik Nunavunmiunut naunaittiaqtumik qanuriiit ihuatqijauniaqtut uvalu ihuatqijaujumiklu qauihaijinun, ukiuqtaqturmiunut, uvalu maligakhaliuqtunut 		
Tattiarnaqtuq – Hikutirvia 2019	 ilihaidjutikhangit katimadjutikharnik talvani Nunallaani Qaujiharnikkut Tutqikhaijit haniani Montreal, Quebec uvanilu Iqaluit, Nunavut 		
Ubluirvia 2019 – Qiqailruq 2020	 Nunallaani Ihivriuqhinikkut Tutqikhaijit katimapkaijut naunaijaidjutikhanik nunamingni 		
Qiqailruq 2020	 naunaijautit nutqaqtitaujut pidjutigiblugu Qalarjuarniq- 19 aanniarutirjuaq (takulugu makpigaq 4. naunaiqhittiarumaguvit) havaqatigiikhuta upalungaijautimik qajangnaitumik iniqtiriangani havaakhaq 		
lmaruqtirvia 2021	 Nunallaani Qaujiharnikkut Tutqikhaijit aullaqtitiffaaqpakhimajut naunaijautit katitirutikhat una pijaaqtuq kinguani inungnun aanniaqtailinirmun uvalu qaujiharnikkut laisit/pijumanikkut pittailidjutit pipkaqtaujut, uvalu nunamingni nunallaani katimajiit ikajuutait Nunallaani Qaujiharnikkut Tutqikhaijit maliktaillu ilangit hivuani ilauyut naunaittiarlugit kiudjutikhait 		
Tattiarnaqtuq 2021	 Havaqatigiingniikkut naunaijautit ajuiqhaqatigiiktut nunaani Arviat, Nunavut 		
Hikutirvia 2022	 Nunallaani Qaujiharnikkut Tutqikhaijit nutqaqtitait aulapkaiplutik naunaijautingit nunamingni 		
Ubluirvia 2022	 havaqatigiikhutik ihivriurniq ajuiqhaqatigiiktut uvani Paris, Ontario katimapkaijut ihuaqhaqhimajunik qanuriniit uvani ArcticNet katimarjuarutaani hamani Toronto, Ontario 		

KEY PROJECT ACTIVITIES (2018 - 2022)

Timeline	Activities
December 2018	 collaborative project planning meeting at ArcticNet conference in Ottawa, Ontario
January – November 2019	 collaborative survey development (involving our project proposal team, Local Research Coordinators, and a number of external reviewers) this led to survey questions, wording, and options that were much more clear, relevant, and accessible for Nunavummiut it also means results can be more meaningful and impactful to researchers, northerners, and policymakers
October – November 2019	 training sessions with Local Research Coordinators near Montreal, Quebec and in Iqaluit, Nunavut
December 2019 - March 2020	 Local Research Coordinators facilitated surveys in their home communities
March 2020	 surveys put on hold due to the COVID-19 pandemic (see page 4. for more details) we started working together on a plan for how to safely continue the project
June 2021	 Local Research Coordinators restarted survey facilitation this could only happen after public health and research license/ethics restrictions allowed it, and with local community organizations' support Local Research Coordinators also followed up with some earlier participants to clarify answers
October 2021	• collaborative analysis workshop in Arviat, Nunavut
November 2022	Local Research Coordinators stopped facilitating surveys in their home communities
December 2022	 collaborative analysis workshop in Paris, Ontario, presentations of refined results at ArcticNet conference in Toronto, Ontario

NAUNAIJAUTIT INIQTAUVIKHAT ATUQTILUGU QALARJUARNIQ-19 AANNIARUTIRJUAQ

IHUAQHAQTAUHIMAJUQ ILIHARVIGJUANGIT UNALU NUNAVUT PITTIARUTAIT

maliklugit inungnut aanniaqtailinikkut maliktakhat unalu havaarihimalugit apiqquutaujut

HAVAKTAUFFAAQHIMAJUQ QARITAUJAKKUT UVALU INUNGNUN NAUNAIJAUTIT

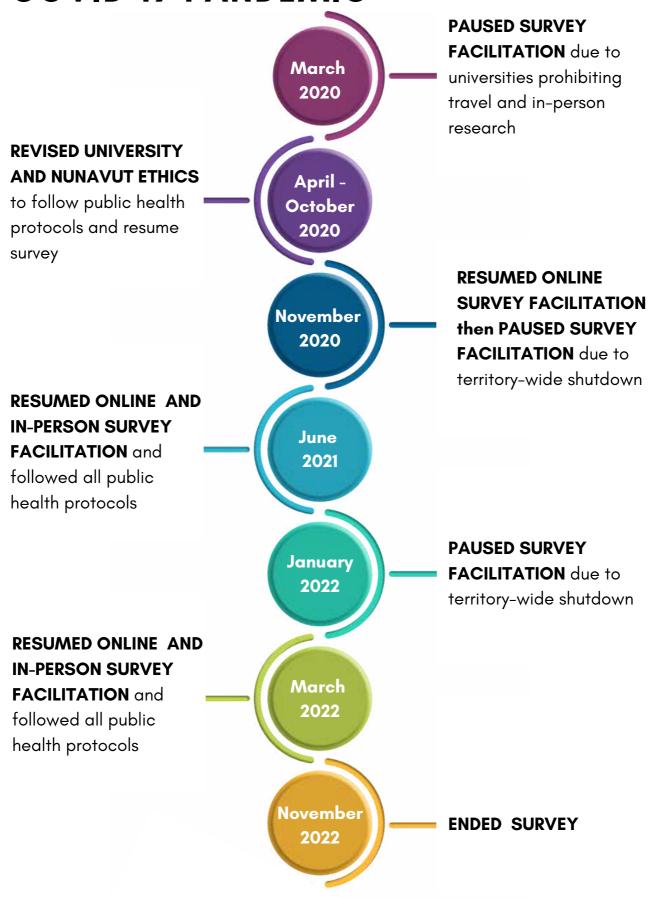
uvalu malikhugit tamaita inungnun aanniaqtailinirmun maligakhat

NUTQARLUGU NAUNAIJAUT

KATITIRUTIKHAT pingmat nunaptingni-tamaat qamitpata



SURVEY TIMELINE DURING THE COVID-19 PANDEMIC



NAUNAIJAINIKKUT KATIMAPKAINIKKUT TAPKUNANGA NUNALLAANI QAUJIHARNIKKUT TUTQIKHAIJIT

Atauttimut, **19 Nunallaani Qaujiharnikkut Tutqikhaijit** ilaungmata havauhikhami, unalu iniqhimajut **360 qaujihaijainiq** tamainnut **8 nunalingni** Nunavunmi.

Nunallaani Qaujiharnikkut Tutqikhaijit qaitqujait nunallaani ilautquplugit atuqhugit naunaitkutit maliktakhangit. Imalluaq, ajuirumajugut aturninnganik ihariagininnganiklu hilakkut, imakkut, hikumut, hilauplu naunaitkutait ikajuutingillu nunamingni ilauyut aullaaqpauhiinik nunakkut (unalu imakkut hikumilu) kingullirni pingahuni ukiuni (talvanga 2017). Ukua ilauyut angutit angnallu tamainik ukiuqaqtut uvalu atuqhimajait aktilaangit, uvalu ajuittut anguniaqtit, hilaup aallangurniani aullaqpaktut, uvaluuniin Inuit kitkut aullaarumajut maniqqami.

Nunallaani Qaujiharnikkut Tutqikhaijit aulatitivakhimajut naunaiyainikkut

Qablunaaqtun uvaluuniit Inuktut ilauyut piumaluaqtainik. Atuqpakhimajut Qualtrics naunaijautinik qaritaujaliqidjutikhat iliurarlugit kiudjutinik hapkuunani iPads. Aulatitivakhimajut naunaijautit nunalaani havagviani ilauyut aihimaviini, naunaiqtaujut inungnun ihuarijaujut qanuriniit. Ilangit ilauyut havaktat naunaijautinik inmingnik atuqhutik qaritaujakkut naujnaujaunmik qaritaujaliqutikkut, taima Qalarjuarniq-19 aanniarniq inungnut aannialiqtailitikhat pittailivauhiit atuqujautitlugit inungmut naunaijautit. ilauyut akiliqtauvaktut ikajuutainut. Pijavut qaujihainirmut ukpirijaujut uvalu laisikkut angirutait aulaqtitinikkut naunaijautimik

Uumunga unniudjutimun, tunivaktavun qanuriliurutinik tunnganiqarluni qaujiharnikkut kiudjutinik atauttimut ukua <u>27 Ekaluktutiarmiut = 100%.</u>

Naunaittiarmaguvit talvuuna unniudjunmik anginirmiklu naunaijautit hivajarlugu:

Shirley Tagalik, Aqqiumavvik Katimajiit 204-218-0866, inukpaujaqegmail.com

Natalie Carter, McMaster-mi Ilihaqvikyuami, carten7emcmaster.ca

Gita Ljubicic, McMaster-mi Ilihaqvikyuami, gita.ljubicic@mcmaster.ca

Pijaangani Nunavunmi-tamainun unniudjutit, aalallu nunallaani unniudjutit, takulugu:

https://straightupnorth.ca/community-wwic-uses-and-needs

SURVEY FACILITATION BY LOCAL RESEARCH COORDINATORS

In total, 19 Local Research Coordinators were involved in the project, and they completed 360 surveys across 8 communities in Nunavut.

Local Research Coordinators invited community members to participate based on certain criteria. Specifically, we wanted to learn about uses and needs of weather, water, ice, and climate information and services from community members who were actively travelling on the land (including water and ice) in the last three years (since 2017). This included men and women of all ages and experience levels, and they could be experienced hunters, seasonal travellers, or people who just like to get out on the land.

Local Research Coordinators facilitated the surveys in English or Inuktut based on participant preference. They used Qualtrics survey software to enter responses on iPads. They facilitated the survey in a community office or in participants' homes, based on individual comfort level. Some participants did the survey on their own using an online survey link, when COVID-19 pandemic public health restrictions prevented in-person surveys. Participants were compensated for their time. We obtained research ethics and license approvals before we started the survey.

For this report, we present the results based on survey answers from a total of 27 Ekaluktutiarmiut = 100%.



Shirley Tagalik, Aqqiumavvik Society, 204-218-0866, inukpaujaqegmail.com

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Gita Ljubicic, McMaster University, gita.ljubicic@mcmaster.ca

To access a Nunavut-wide report, and other community reports, please visit:

https://straightupnorth.ca/community-wwic-uses-and-needs/

TUHAQTITAULLUAQTUKHAT KIVGAQTUIJUNUT

Uvani 2021 unalu 2022 havaqatigiingniikkut naunaijautit katimaqjuarutit, Nunallaani Qaujiharnikkut Tutqikhaijit havaktait tualunik tuhaqtidjutinik kivgaqtuqtunun:

naunaitkutikhat naunaiqtauhimajut Tunilugit aallanik ulitirvikhanik nunallaanut



(nutaanguqpalialugit) Hilarlungnikkut naunaitkutikhat

najugaingitlu tikiutijaangat qaritaujakkut Ikiklijumirutikharnik nampangit mapirniit avatiliqinikkut hunavalungnik

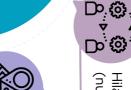




najugakhainik anguniarviit najugaini Ihagiagiyauyut hilahiutit



TUHAQTITAULLUAQT KIVGAQTUIJUNUT UKHAT



(nutaanguqpalialugit) Hilarlungnikkut naunaitkutikhat





Angiklijuumirlugu ikajuutikhat

nunallaani piliriakhat unalu

hivuliqtiuniq

Kajumiktumik akituvallangittuniklu qaritaujakkut (ihuaqhilugu akinga ikajuutingillu ukiuqtaqtumi InReach/SPOT titiraqtakhait)



ukpiginikkut hunanik anugikkut naunaitkutikhat), pidjutaujut (kikliqaqtut taidjutit uvalu naunaiqhijut Aulahimaaqtumik havaklutik ihuarnikkut

Havaklugit itqungniarutit hunat tapkua ajungnaitut naunaijagiangani uvalu aturlugit (kalat naunaitkutiqaqtut tautungnaqtut)



uuminnga nunalaani ikajuutinik Angiklijuumirlugu ilihimaniq unalu pinahuarutit





atugiangani (ilaliutilugit atadjutait) Pilugit hikup naunaitkutit uvalu qangatayukkut piksait ajungnaitunik

KEY MESSAGES FOR SERVICE PROVIDERS

workshops, Local Research Coordinators developed At the 2021 and 2022 collaborative analysis twelve key messages tor service providers:

that is specific to communities Provide more tide information





ease of interpretation Create colour-coded visuals for

online environmental products Reduce number of pages and sites to go to when accessing



Need more weather stations in key hunting areas

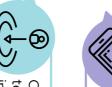


SERVICE XEY



information (update more often) Need more real time weather

MESSAGES FOR PROVIDERS



Faster and more affordable internet InReach/SPOT subscriptions) (address cost and subsidize northern



Expand support for community

programs and leadership

term forecast and more detailed wind information), leads to trust in products Continue to work on accuracy (short

Create forecast products that are easy to interpret and use (colour coded visuals)





services and programs Increase awareness of local

Increase the number of VHF repeaters and cell towers (address calling for help)





Make ice charts and satellite for tutorials) images simpler to use (add links

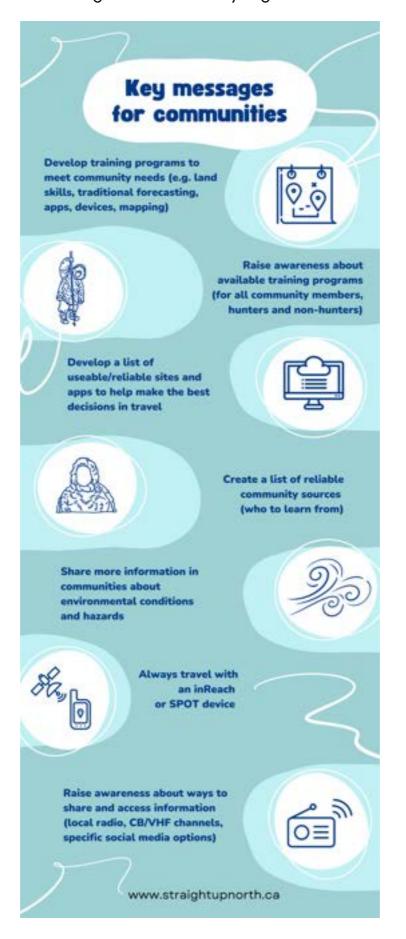
TUHAQTITAULLUAQTUKHAT NUNALLAANUT

Uvani 2022 havaqatigiingniikkut naunaijautit katimaqjuarutit, Nunallaani Qaujiharnikkut Tutqikhaijit havaktait saivat tuhaqtidjutit nunallaanun timiqutaujunut:



KEY MESSAGES FOR COMMUNITIES

At the 2022 collaborative analysis workshop, Local Research Coordinators developed seven key messages for community organizations:



UNDERSTANDING THE NUMBERS IN THIS REPORT

PERCENT

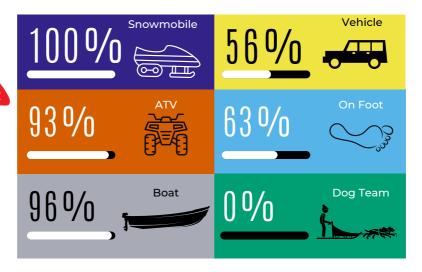
100% = all 27 participants

Most of the survey results in this report are shown as % (percent) where 100% means all 27 participants in Cambridge Bay who completed the survey.

Sometimes participants could choose more than one answer, so totals in some figures don't add to 100%.

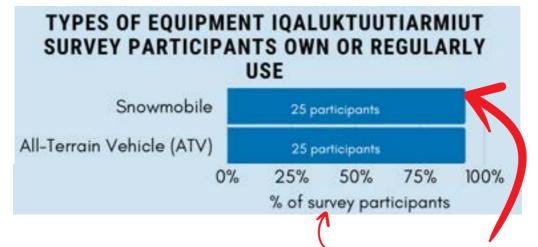
In this example **from p. 13**, participants could choose more than one method of transportation.

METHODS OF TRANSPORTATION SURVEY PARTICIPANTS USE TO TRAVEL ON THE LAND



COUNTS

Count = the number of participants giving that answer



Some of the charts show the results in percent and the **count** (actual number) of participants who gave that answer. In this example **from p. 12**, snowmobiles are owned or regularly used by 93% of participants (25 participants).

UNDERSTANDING THE NUMBERS IN THIS REPORT (CONTINUED)

PARTICIPANTS

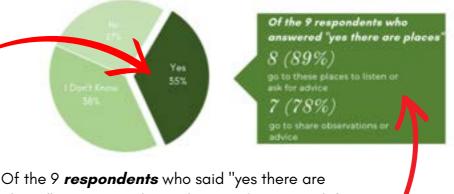
Participants = everyone (all 27 people) who did this survey in Cambridge Bay

RESPONDENTS

Respondents = only the participants who answered follow-up questions

There are some questions in the survey that not everyone answered. Participants who answered "no" to a question would skip to the next section. But participants who answered "yes" to the same question would be asked some *related follow-up questions*. When we show the results to follow-up questions, we call this group of participants "**respondents**", because they were the ones who answered the question.

In this example **from p.28**, 35% of the participants said "yes there are places in Cambridge Bay where people meet to talk about recent travel conditions".



Of the 9 **respondents** who said "yes there are places", 89% go to these places to listen or ask for advice and 78% go to share observations or advice.

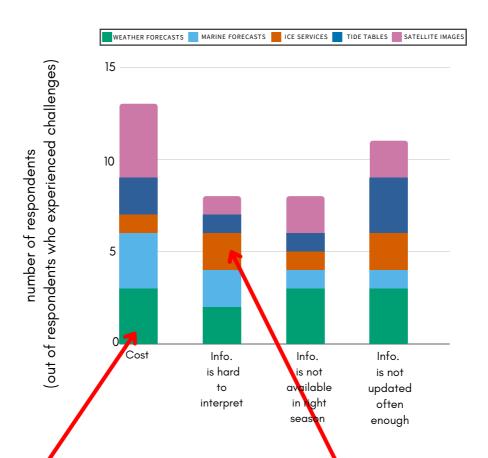
Only the participants who said "Yes, there are places", were asked the follow-up question, "Do you go to these places to listen or ask for advice?" This smaller group of participants who answered the follow-up question are called **respondents**. So the percent shown for respondents are out of the total who answered the question, and not the total of participants.

UNDERSTANDING THE NUMBERS IN THIS REPORT (CONTINUED)

RESPONDENTS

Respondents = only the participants who use forecasting products

REASONS WHY ENVIRONMENTAL FORECASTING INFORMATION IS DIFFICULT FOR EKALUKTUTIARMIUT RESPONDENTS TO ACCESS



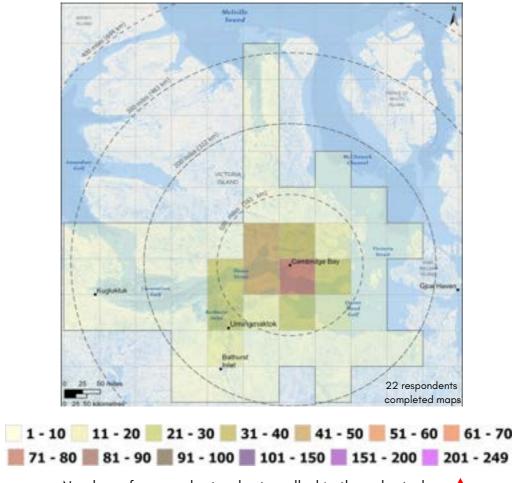
Some participants did not use every type of environmental forecasting information (i.e. weather forecasts, marine forecasts ice services, tide tables, satellite images).

In this example from **p. 37**, of the respondents who said they experience "Yes, I experience challenges when accessing weather forecasts",

3 of them experience challenges due to cost. Of the respondents who said "Yes, I experience challenges when accessing ice services", 2 of them experience challenges because the information is hard to interpret.

UNDERSTANDING THE MAPS IN THIS REPORT

TOTAL TRAVEL



Number of respondents who travelled in the selected are

MAP COLOURS AND LEGENDS

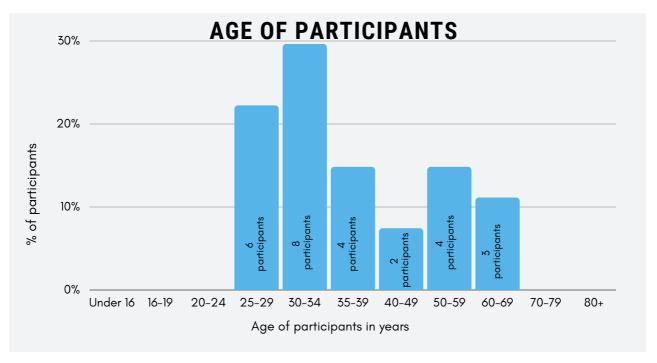
Each coloured box on the maps represents a certain number of respondents who travelled to that area, and all of the types of transportation they used to travel there (e.g. if a respondent went to an area by ATV and by snowmobile, it is counted as having travelled to the area twice).

Darker/brighter colours = more respondents went there. Lighter colours = less respondents went there.

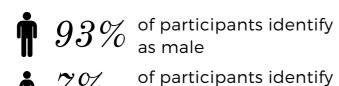
Respondents = only the participants who completed maps

Some participants did not complete travel maps (due to technical issues and other reasons). When we show the maps, we call this group of participants "respondents", because they were the ones who completed maps.

EKALUKTUTIARMIUT SURVEY PARTICIPANT DEMOGRAPHICS

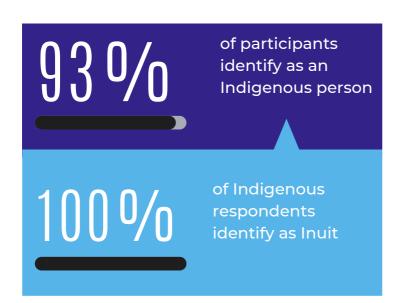


Survey participants ranged in age from 25 to 69 years, with the highest proportion (29%) being between 30–34 years old. No one under the age of 25, or 70 years and older, participated in the survey.



as female

Most participants identify as male (93%), and 7% identify as female.



Nearly all participants identify as an Indigenous person (93%), and all of the Indigenous respondents identify as Inuit.

EKALUKTUTIARMIUT PARTICIPANT DEMOGRAPHICS (CONTINUED)

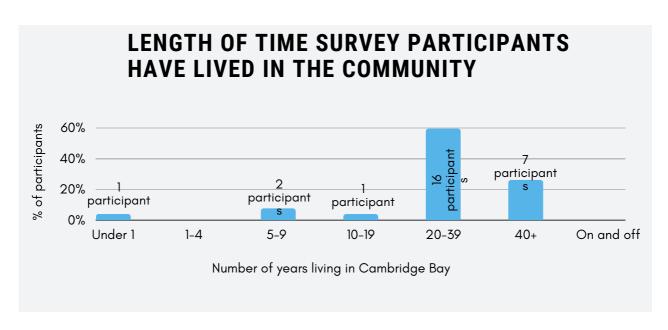


Participants were asked about which languages they speak.

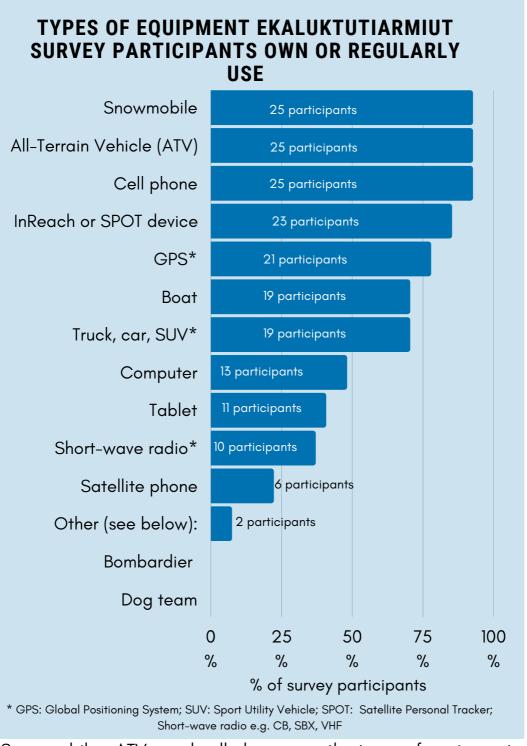
All participants speak English (100%). Some speak Inuktitut (26%), and some speak Inuinnagtun (30%).

It is important to understand how long participants have lived in Cambridge Bay as this relates to (although does not necessarily determine) how much experience they have with travel on the land, water, or ice.

Most participants (86%) have lived in Cambridge Bay for 20 or more years.



TRAVEL EQUIPMENT





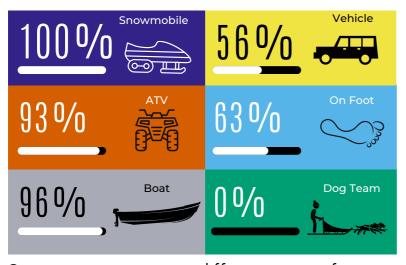
85%
OF PARTICIPANTS HAVE ACCESS TO THE INTERNET IN THEIR HOME

Snowmobiles, ATVs, and cell phones are the types of equipment most often owned or regularly used by participants, followed by inReach or SPOT devices. Participants who answered "Other" use a side-by-side.

Most (85%) participants have access to the internet in their home. This is important to know because it affects what kinds of environmental forecast information they might be able to access.

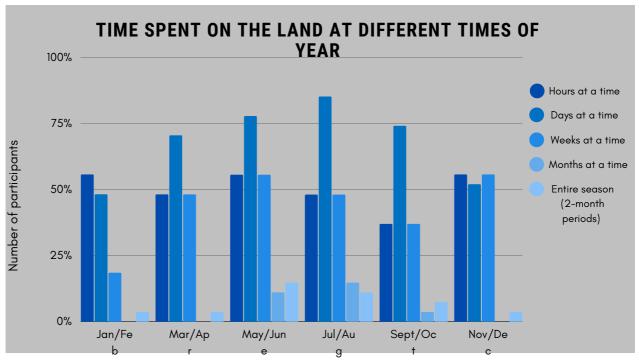
TRAVEL HABITS

METHODS OF TRANSPORTATION SURVEY PARTICIPANTS USE TO TRAVEL ON THE LAND



When survey participants travel on the land, snowmobile is the most common method of transportation used. This is followed by boats and ATVs. Participants also travel on foot, and by vehicle.

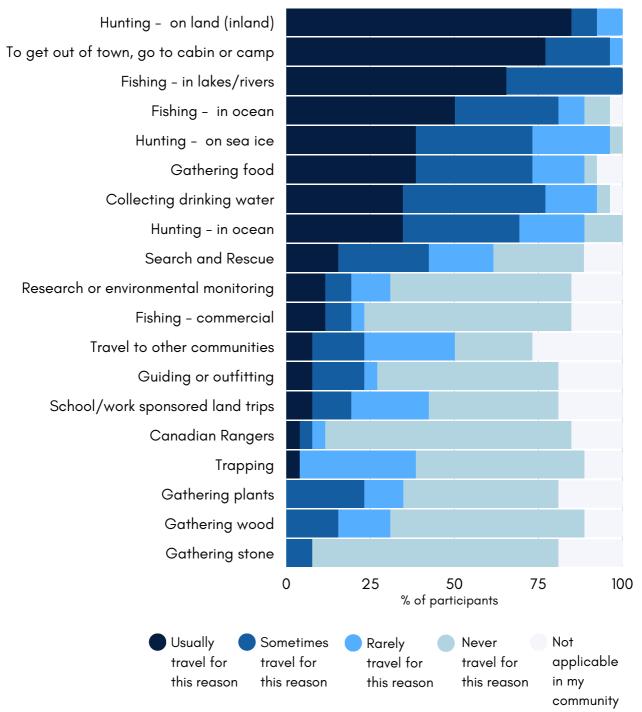
Survey participants use different types of transportation at different times of year. Snowmobiles, ATVs, vehicles, and on foot are used all through the year. Some snowmobiles are hydroplaned over water all summer. Boats are used from June to October.



In different times of year, survey participants spend different lengths of time on the land. Most commonly, participants are on the land for hours or days at a time. In May through August the number of participants that are out on the land for weeks at a time, increases. Some travel for longer periods of time.

TRAVEL HABITS

REASONS EKALUKTUTIARMIUT PARTICIPANTS USUALLY TRAVEL ON THE LAND

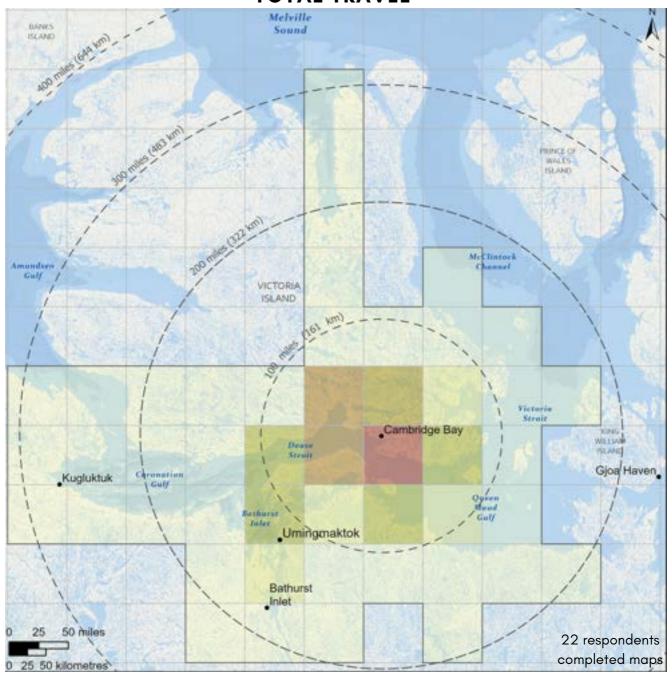


Survey participants travel on the land, water, and ice for many reasons. Most often they travel to hunt on land, to get out of town, go to a cabin or camp, and to fish in lakes, rivers, or the ocean.

Ekaluktutiarmiut participants also travel to visit Bathurst, Kugluktuk, and Umingmaktuq (Bay Chimo).

WHERE EKALUKTUTIARMIUT RESPONDENTS TRAVEL

TOTAL TRAVEL





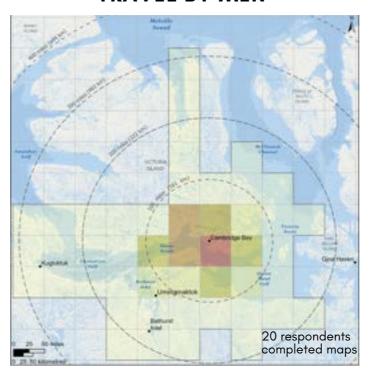
Number of respondents who travelled in the selected area

To access full-page maps visit

https://straightupnorth.ca/community-wwic-uses-and-needs/

WHERE EKALUKTUTIARMIUT MEN AND WOMEN RESPONDENTS, TRAVEL

TRAVEL BY MEN



TRAVEL BY WOMEN





Number of respondents who travelled in the selected area

WHERE EKALUKTUTIARMIUT RESPONDENTS TRAVEL (BY AGE)

AGES 25 TO 34 TRAVEL







AGES 50 TO 69 TRAVEL





Number of respondents who travelled in the selected area

WHERE EKALUKTUTIARMIUT RESPONDENTS TRAVEL (BY MODE OF TRAVEL)

SNOWMOBILE TRAVEL



BOAT TRAVEL



ATV TRAVEL

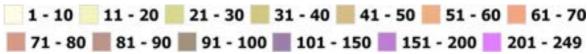


VEHICLE TRAVEL



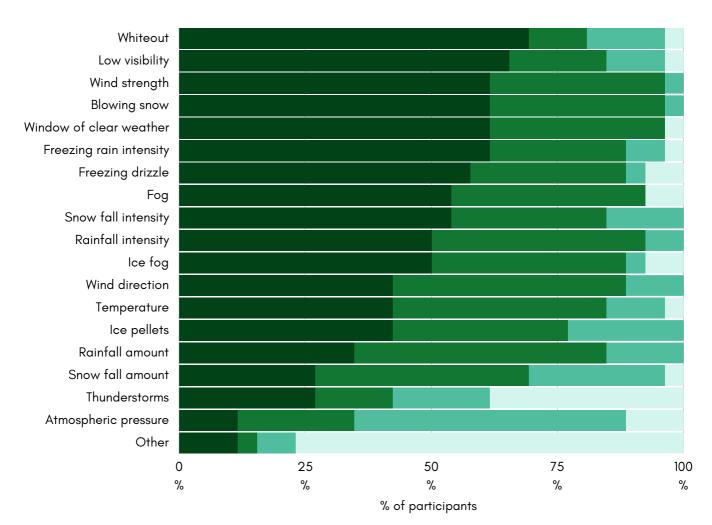
ON FOOT TRAVEL





Number of respondents who travelled in the selected area

WEATHER CONDITIONS EKALUKTUTIARMIUT PARTICIPANTS CHECK BEFORE THEY TRAVEL





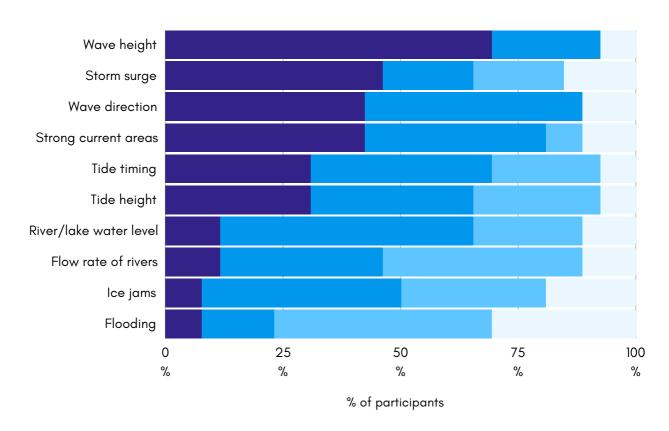
Necessary:
I would not
travel without
knowing about
this condition

Good to know: It is helpful to know about this condition, it informs travel decisions Don't consider:
I don't consider
this condition to
make travel
decisions

Not applicable: This condition is not applicable in my community

Ekaluktutiarmiut participants check many types of weather conditions before they travel on the land, water, sea ice, and snow. Whiteout, low visibility, wind strength, blowing snow, window of clear weather, and freezing rain intensity are the weather conditions most commonly considered necessary to check before travelling. Participants who said "Other" also check wind speed on the water.

WATER CONDITIONS EKALUKTUTIARMIUT PARTICIPANTS CHECK BEFORE THEY TRAVEL



Necessary:
I would not
travel without
knowing about
this condition

Good to know:

It is helpful to know about this condition, it informs travel decisions

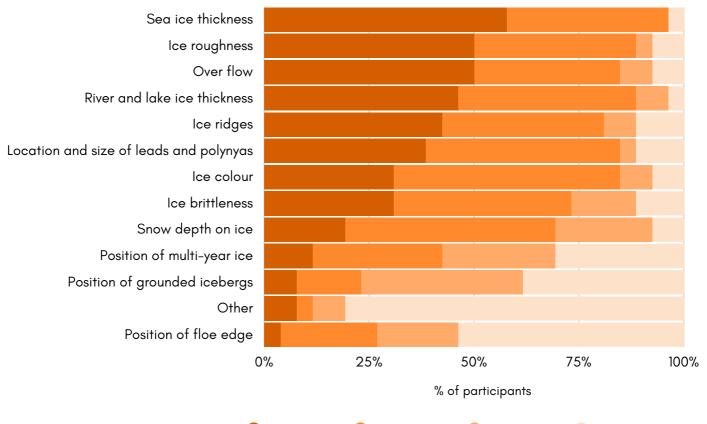
Don't consider:
I don't consider
this condition to
make travel
decisions

Not applicable: This condition is not applicable in my community



Ekaluktutiarmiut participants check many types of water conditions before they travel. Wave height, storm surge, wave direction, strong current areas, tide timing, and tide height are the water conditions most commonly considered necessary to check before travelling.

ICE CONDITIONS EKALUKTUTIARMIUT PARTICIPANTS CHECK BEFORE THEY TRAVEL



Necessary:
I would not

I would not travel without knowing about this condition Good to know:

It is helpful to know about this condition, it informs travel decisions Don't consider:

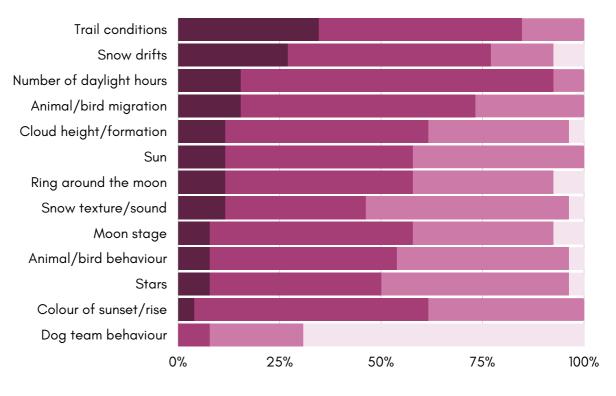
I don't consider this condition to make travel decisions Not applicable:

This condition is not applicable in my community



Ekaluktutiarmiut participants check many types of ice conditions before they travel. Sea ice thickness, ice roughness, over flow, river and lake ice thickness, ice ridges, location and size of leads and polynyas, ice colour, and ice brittleness are the ice conditions most commonly considered necessary to check before travelling. Participants who said "Other" also check the direction of snow drifts.

OTHER ENVIRONMENTAL **CONDITIONS EKALUKTUTIARMIUT** PARTICIPANTS CHECK BEFORE THEY TRAVEL



% of participants

Necessary: I would not travel without knowing about this condition

It is helpful to know about this condition, it informs travel decisions

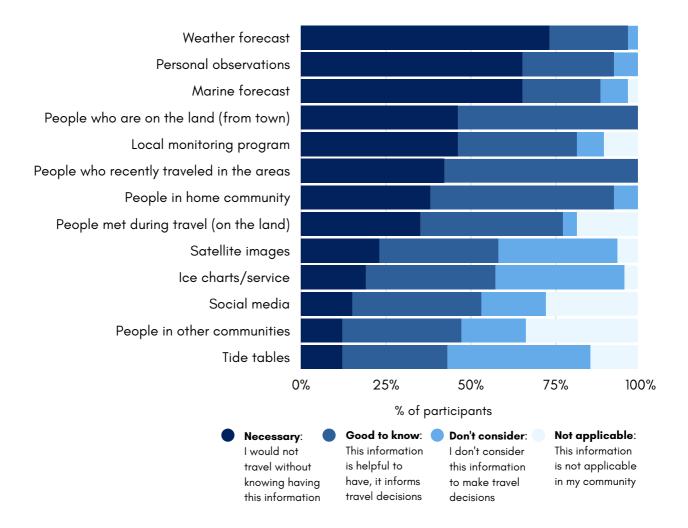
Good to know: Don't consider: I don't consider this condition to make travel decisions

Not applicable: This condition is not applicable in my community



Ekaluktutiarmiut participants check many other environmental conditions before they travel on the land. Trail conditions and snow drifts are the other environmental conditions most often considered necessary to check before travelling.

INFORMATION SOURCES EKALUKTUTIARMIUT PARTICIPANTS USE WHEN PLANNING A TRIP



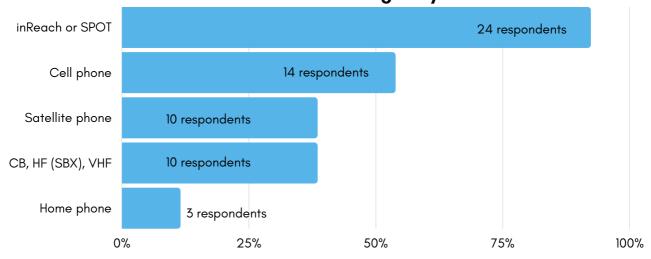
When planning a trip, Ekaluktutiarmiut participants access many sources of environmental information before they travel. Weather forecast, personal observations, and marine forecast are information sources that participants most often consider necessary to check before travelling.

While on the land talking to people who have recently taken the route or been close to the area participants are going to, people met during travel (on the land), and people who are on the land in the area participants are planning to travel to, as well as personal observations, weather forecast, and marine forecast are most often considered necessary to check.

When planning to return home talking to people met during travel, personal observations, people who have recently taken the route or been close to the area, weather forecast, marine forecast, and people who are on the land in the area participants are planning to travel to are the information sources that participants most often consider necessary to check.

CONTACTING COMMUNITY INFORMATION SOURCES

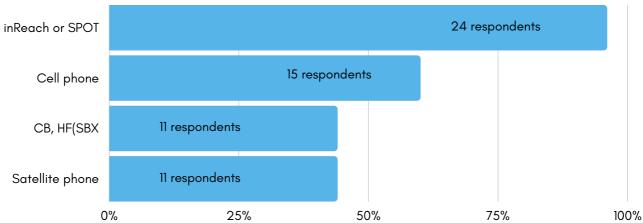
Contacting people who are on the land while respondents are in Cambridge Bay



% of respondents (out of a total of 26 respondents who contact people on the land)

Respondents who contact people on the land to ask about environmental conditions while they themselves are in Cambridge Bay mostly use inReach or SPOT devices, or cell phones, to contact them.

Contacting people in Cambridge Bay while on the land

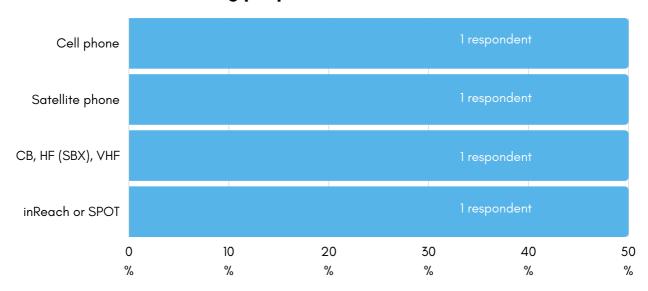


% of respondents (out of a total of 25 respondents who contact people in Cambridge Bay)

Respondents who contact people in Cambridge Bay to ask about environmental conditions while they themselves are on the land mostly use inReach or SPOT devices, or cell phones.

CONTACTING COMMUNITY INFORMATION SOURCES (CONTINUED)

Contacting people in other communities



% of respondents (out of a total of 2 participants) who contact people in other communities

The two respondents who contact people in other communities to ask about environmental conditions use cell phones, satellite phones, short-wave radios, and inReach or SPOT to contact them.

The other communities contacted are: Kugluktuk and Gjoa Haven.

other radio

CONTACTING OTHERS FOR HELP



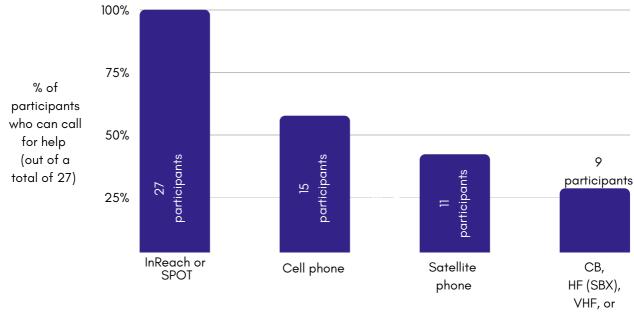
If Ekaluktutiarmiut participants get stranded or have an accident on the land, all of them can call for help.

Participants would call a **family member** (56%), or **friend** (56%), and some would call **local search and rescue** (27%) for help.

Participants would also call **Hunters and Trappers Association** (15%), or **Canadian Rangers** (15%), as well as **Nunavut Emergency Management** (8%).

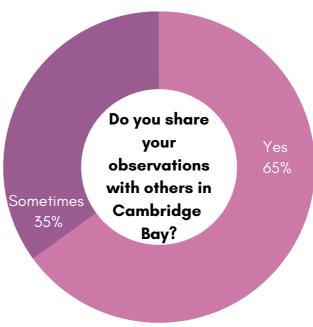
All participants call for help using inReach or SPOT device. They also use cell phones, satellite phones, and short-wave radios.

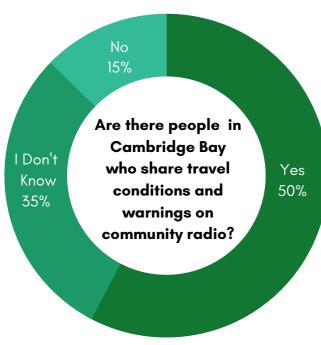




SHARING OBSERVATIONS OF WEATHER, WATER, ICE, OR SNOW CONDITIONS WITH OTHERS IN CAMBRIDGE BAY

All of the participants share their observations of weather, water, ice, or snow conditions with others in Cambridge Bay.





Half of the participants said there are people regularly going on community radio in Cambridge Bay, or CB/HF(SBX)/VHF radio, to share warnings or provide advice about weather, water, or ice conditions. A few (35%) participants did not know if people regularly go on community radio in Cambridge Bay, or CB/HF(SBX)/VHF radio, to share warnings or provide advice about weather, water, or ice conditions.

GATHERING TO TALK ABOUT TRAVEL CONDITIONS WITH OTHERS IN CAMBRIDGE BAY

Are there places in Cambridge Bay where people tend to meet and talk about recent travel conditions?



About one third (35%) of participants said there are places where people tend to meet and talk about recent travel conditions, or weather, water, ice and other environmental conditions. More than one third (38%) did not know, and 27% said there are no places where people meet to talk about travel conditions. Of the 35% (9 participants) who said there are places where people meet, most go to those places to listen or ask for advice (89%), or to share observations or advice (78%).

PLACES EKALUKTUTIARMIUT GATHER TO TALK ABOUT TRAVEL CONDITIONS

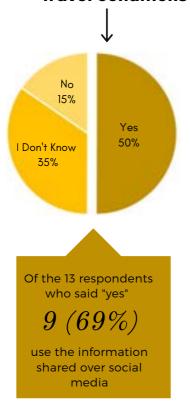
- Bank
- Co-op store
- Ikaluktutiak Elks Lodge
- Homes
- Hunters and Trappers
 Organization
- Hunting grounds



- Northern store
- On the street
- Post office
- Saxifrage Resto-café
- Whenever we run into each other either at the store or work place

SOCIAL MEDIA EKALUKTUTIARMIUT USE TO SHARE TRAVEL CONDITIONS

Do Ekaluktutiarmiut
use social media to talk about
travel conditions?



There were 13 Ekaluktutiarmiut participants who identified being aware of social media pages or groups where people share observations or advice about weather, water, and ice conditions mentioned using Facebook.

It is important to note that some respondents have their own knowledge of the weather, water, ice, and snow conditions so they do not check social media for this information.

Commonly used social media

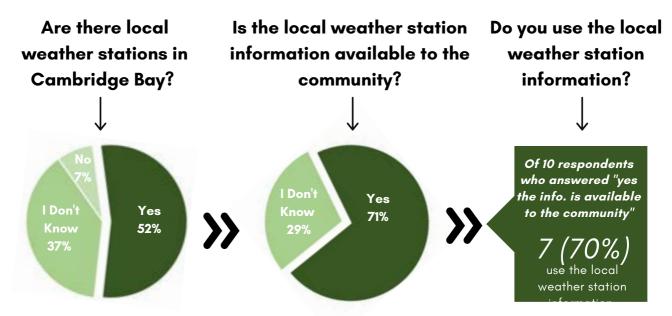
- Facebook
 - o Cambridge Bay News
 - Cambridge Bay Sell Swap
 - EHTO Information Page
 - Kugluktuk News
 - Nunavut hunting stories of the day
- Instagram
- SIKU, SIKU app



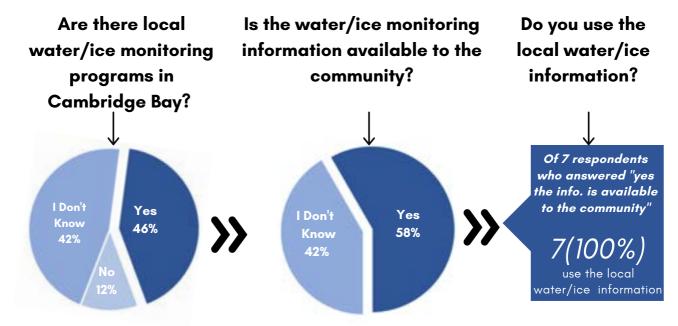
Topics, descriptions, and photos include

- Environmental conditions (experienced on the land)
- Ice conditions, ice thickness
- Local hazards, dangers, obstacles
- Possible blizzard warnings
- Trail conditions
- Weather Conditions temperature, wind, snow
- Wildlife observations

COMMUNITY MONITORING PROGRAMS

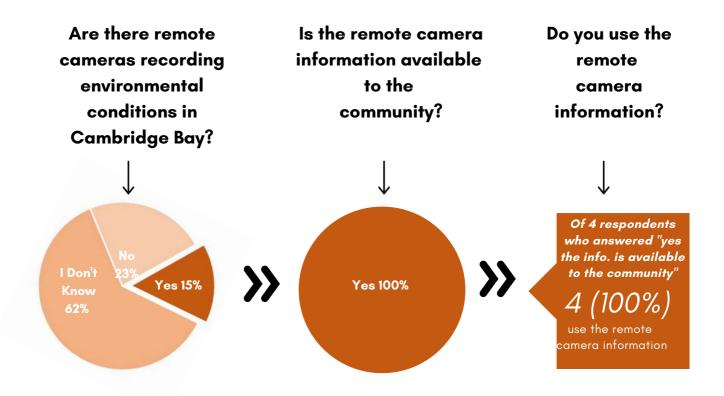


When asked about local weather stations, it is notable that 10 participants said that they do not know if there are local weather stations and 16 participants said that local weather stations do or do not exist. Of the 14 participants who said there are local weather stations in Cambridge Bay, 10 of them said the weather station information is available in Cambridge Bay, and 7 of them said that they use the information.



When asked about local water and ice monitoring programs it is notable that 11 participants said that they do not know if there are local water and ice monitoring programs and 15 participants said that local programs do or do not exist. There were 12 participants who said there are local water/ice monitoring programs. Of these, 7 respondents said the information is available in Cambridge Bay, and all 7 respondents said that they use the information.

COMMUNITY MONITORING PROGRAMS (CONTINUED)



Remote cameras are cameras placed in areas where a photographer cannot be at the camera to take photos. Remote cameras often have a self-timer built into the camera so photos can be taken at specific times. An example is a remote camera mounted somewhere near a floe edge, with a built-in timer that is set to take a photo at noon each day.

When asked about remote cameras, it is notable that more participants said that they do not know if there are remote cameras than said that remote do or do not exist. 4 participants said there are remote cameras near Cambridge Bay. Those 4 participants said the remote camera information is available in Cambridge Bay, and also said they use the remote camera information.

COMMUNITY MONITORING PROGRAMS (CONTINUED)

Ekaluktutiarmiut participants identified several community-based monitoring programs that are run by a number of organizations. A wide range of conditions are monitored related to weather, water, and ice.

LOCAL WEATHER STATIONS	PROGRAM PROVIDER	WHAT IS MONITORED
Arctic Research Foundation	Shawn Marriott (Arctic Research Foundation)	Wind conditions, temperature, rainfall
Canadian High Arctic Research Station (CHARS) weather station	Arctic Research Foundation, Polar Knowledge Canada	Wind, visibility, snow conditions, temperature
Community Aerodrome Radio Station (CARS)		Temperature, wind
University of Calgary	University of Calgary (weather information available at SIKU.org)	Temperature, wind direction, atmospheric pressure

LOCAL WATER/ICE PROGRAMS	PROGRAM PROVIDER	WHAT IS MONITORED
Canadian High Arctic Research Station (CHARS)	Polar Knowledge Canada	Sea ice thickness and roughness
SmartICE	Hunters and Trappers Organization, SIKU, SmartICE	Sea ice thickness and roughness, pollution

L	OCAL REMOTE CAMERAS	PROGRAM PROVIDER	WHAT IS MONITORED
li	Distant Early Warning (DEW) ine weather cameras close by (PIN E)	Raytheon	Visibility
	lunters and Trappers Organization	Hunters and Trappers Organization	Current weather
٧	Vildlife monitoring	Hunters and Trappers Organization	Wildlife

PRODUCTS AND ACCESSING ENVIRONMENTAL FORECASTS

Along with community sources of information to decide if it is safe to travel, Ekaluktutiarmiut respondents use a wide range of weather and marine forecasts available. There may be other information sources available beyond those mentioned by respondents.

WEATHER FORECAST PRODUCTS USED

- CBC news
- Cellular or satellite phone services
- Environment Canada (www.weather.gc.ca)
- Google weather
- inReach weather
- Online weather
- Radio
- Ventusky (www.ventusky.com)
- Windy (www.windy.com), Windy app
- Yr (www.yr.no)

MARINE FORECAST PRODUCTS USED

- Environment Canada (https:/weather.gc.ca/marine)
- Google
- inReach
- Phone apps
- Radio station
- Tide time
- Ventusky (www.ventusky.com)
- VHF radio
- Windy (www.windy.com), Windy app
- Yr (www.yr.no)

PRODUCTS AND ACCESSING ENVIRONMENTAL FORECASTS (CONTINUED)

Along with community sources of information, to decide if it is safe to travel Ekaluktutiarmiut use a wide range of ice charts/services, tide table and and satellite image products from polar service providers.

ICE CHARTS/SERVICES USED

- Canadian High Arctic Research Station
- Canadian ice charts online provided by the government (https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/latest-conditions.html)
- Hunters and Trappers Organization
- Satellite imagery
- SIKU (www.siku.org)

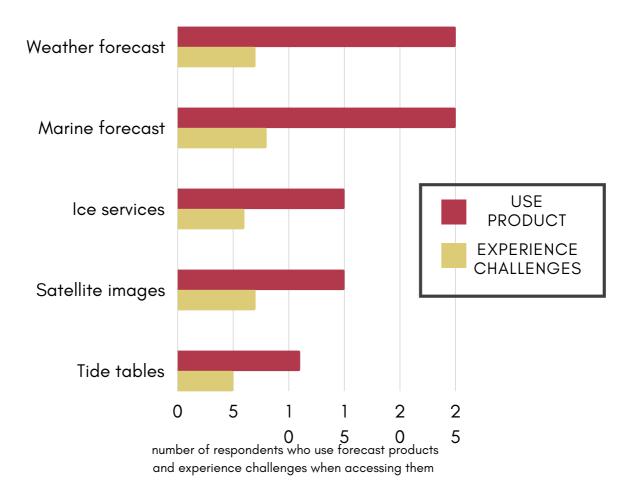
TIDE TABLE PRODUCTS USED

- Google
- Tide Forecast (https://www.tide-forecast.com/locations/Cambridge-Bay-Nunavut-NWT/tides/latest)

SATELLITE IMAGE PRODUCTS USED

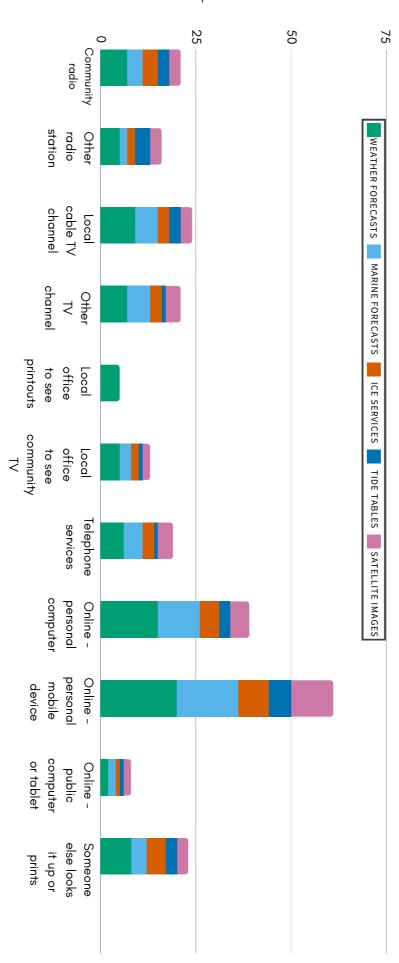
- Google
- Hunters and Trappers Organization
- inReach Earthmate app
- NASA EOSDIS Worldview (https://worldview.earthdata.nasa.gov)
- SIKU app

PRODUCTS AND ACCESSING ENVIRONMENTAL FORECASTS (CONTINUED)



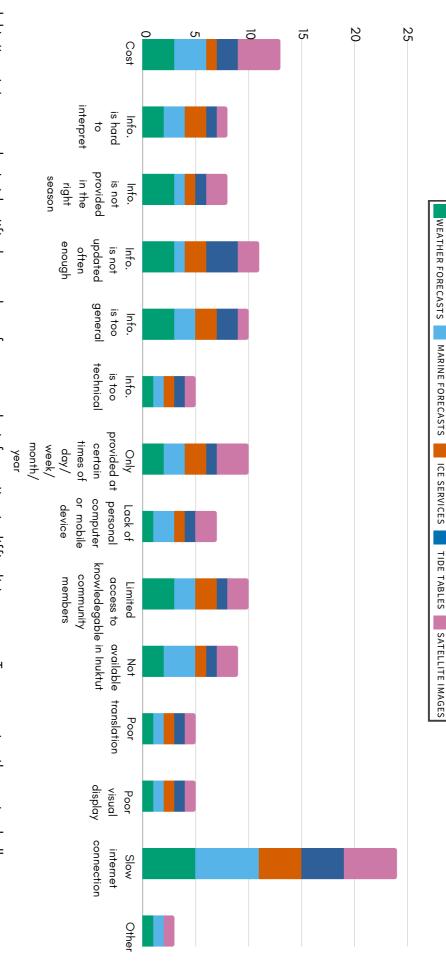
Of the forecasting products used, respondents most often rely on weather forecasts and marine forecasts, and the other services are less often used. Of the 93% of participants who use **weather forecasts**, 28% experienced challenges when accessing them. Of the 93% of participants who use **marine forecasts**, 32% experienced challenges when accessing them. **Ice services** were used by 56% of participants and of these, 40% experience challenges when accessing them. **Satellite images** were used by 56% of participants, 47% of whom experience challenges when accessing them. **Tide tables** were used by 41% of participants and of these, 45% experienced challenges.

RESPONDENTS ACCESS POLAR SERVICES **WAYS THAT EKALUKTUTIARMIUT**



radio. cable TV channel, asking someone else to look it up or print it tor them, or listening to community mostly by going online using a personal mobile device or personal computer, by watching a local Ekaluktutiarmiut respondents access environmental forecast products in a range of ways, and number of respondents (out of respondents who experienced challenges))

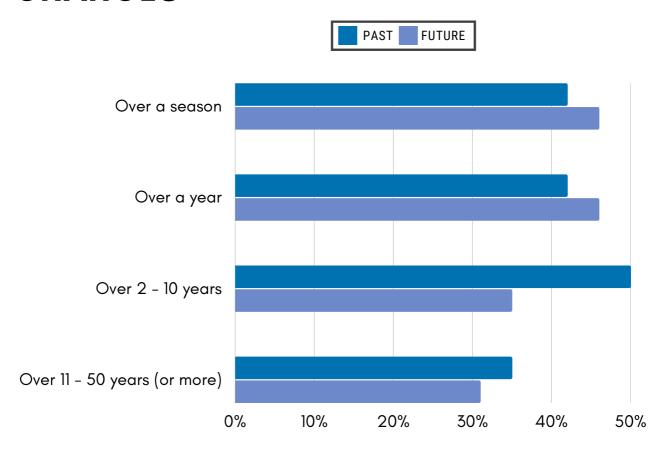
INFORMATION IS DIFFICULT FOR EKALUKTUTIARMIUT REASONS WHY ENVIRONMENTAL FORECASTING RESPONDENTS TO ACCESS



Ekaluktutiarmiut respondents identified a number of reasons why information is difficult to access. To summarize the main challenges:

- Slow internet connection creates a challenge for accessing all online products.
- Cost creates a challenge tor accessing all online products, in particular satellite images
- other areas. make it ditticult to access environmental torecasting intormation. These survey results do not necessarily mean that there are no challenges in Information that is not updated often enough creates a challenge for accessing all online products (except tide tables) especially weather forecasts and ice services. Respondents who said "Other" said that lack of resources, and the lack of high speed internet in Cambridge Bay

INTEREST IN INFORMATION ABOUT PAST AND FUTURE ENVIRONMENTAL CHANGES



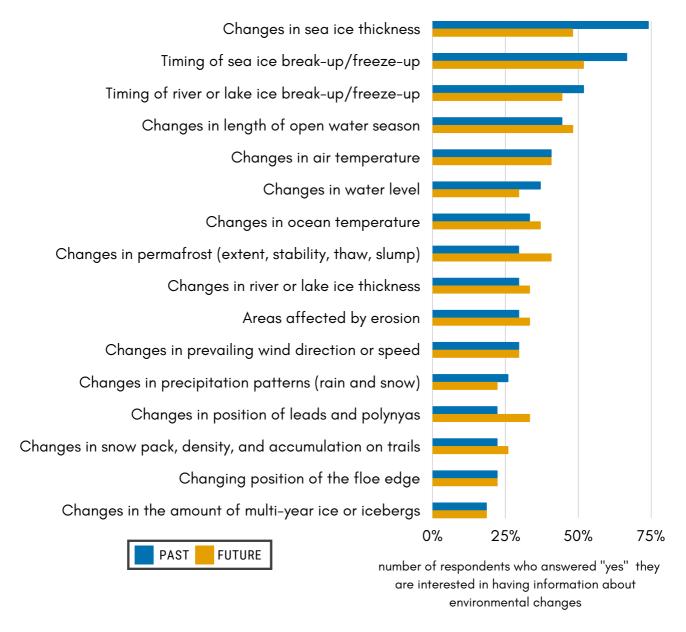
% of participants who said "yes" they are interested in having information about long-term environmental changes

More participants are interested in information about future changes to weather, water or ice conditions (related to climate change) over one season or year than are interested in past changes over one season or year.

However, more participants are interested in information about changes over the past 2-10, or 11-50 years or more, than are interested in information about future changes over the next 2-10, or 11-50 years or more.

INTEREST IN LONG-TERM ENVIRONMENTAL CHANGES

INFORMATION ABOUT PAST OR FUTURE CHANGES FOR MAKING DECISIONS



Respondents are interested in having information about past and future environmental changes. Common topics of interest included past and future changes in sea ice thickness, changes in timing of sea ice break-up/freeze-up, and changes in timing of lake ice break-up/freeze-up.

INTEREST IN TRAINING

Respondents who said they were interested in receiving training on survival skills and navigating the land (15 participants), observing and understanding environmental conditions (18 participants), local environmental monitoring programs (15 participants), and accessing or using social media pages or groups (10 participants), were invited to describe the kinds of training they are interested in. Respondents were also asked to share about who they would like to learn from, and environmental conditions they would like to learn more about. The points below were organized by report writers to group them into similar topics.



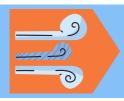
Improving Navigation Skills

- Avoiding bad areas (currents, dangerous)
- Navigating the weather conditions the traditional way
- Travelling to unfamiliar places
- Water navigation



Developing Safetyand Survival Skills

- Search and rescue and CASARA (Civil Air Search and Rescue Association)
- Land survivál skills
- Ice safety, ice rescue



Increasing Knowledge of Environmental Conditions

- Different conditions in places
- High tide, low tide
- Historical records of ice break up and freeze up compared to today
- Ice conditions
- Impact of climate change
- Local weather obervations
- Monitoring wildlife
- Weather conditions



Strengthening
Hunting and Inuit
Cultural Practices
and Skills

- Building igluit
- Building stone houses
- Good spots to travel
- Hands on, experiential training from hunters and Elders about all aspects of being on the land, including about weather



Gaining Familiarity with Technology



Connecting to Local
Programs and
Services

- Environment Canada
- GPS
- Ice charts
- SIKU

- Canadian Rangers
- Hunters and Trappers Organization
- Polar Knowledge Canada

Iqaluktuutiaq, Nunavut Cambridge Bay, Nunavut



Qanurilningit nunagijaujumi naunaijautit avataujumi nalautaarninignik aturningit ihariagijainiklu

Results of a community survey on environmental forecasting uses and needs

UBLUIRVIA 2023 DECEMBER 2023