



Fisheries and Oceans Pêches et Océans
Canada Canada

Institute of Ocean Sciences

Institut des Sciences de la Mer

9860 West Saanich Road
Sidney, B.C. Canada
V8L 4B2

9860 West Saanich Road
Sidney, B.C. Canada
V8L 4B2

12 January 2022

Mosha Cote

Research liaison

Nunavummi Qaujisaqtulirijikkut/Nunavut Research Institute (NRI)

Iqaluit, NU

X0A 0H0

Chairperson

Nunavut Impact Review Board (NIRB)

P.O Box 1360

Cambridge Bay, NU

X0B 0C0

TALVUUNA: Qauyihaiyut Laisiutaat **#04 013 21R-M 2021** Ukium Nunngutaanut
Naunaitkutat 2022-milu Parnaiyautit.

Halu NRI-kut, NIRB-kut ilaulyumayullu,

Una titiraq pihimalugu naunaitkutariyaqqut 2021-mi taryumik qauyihaipluta Qitiqmiut taryuanik, ataagut taamna amihunik ukiunik atuqtauyughaq NRI-kut laisiutaat **#04 013 21R-M**. Una titiraq ilittuqhitiyuqtaug parnaiyautiptingnik 2022-mi havakvighaptingnik, iniqtauyughat ataagut atahiq laisiutik.

Hivuanit havaaptingnit hamani aviktuqhimayumi, qauyihaipluta ilitturivaallirumayaqqut taryuq Qitiqmiuni qauyihaiqlugillu qanurininganiit taryumut kuugaqmit harvaqtumit tagyaaqmillu-avugiiktut immat nirukilruni ikkalrunilu ikirahangnit. Qauyihaiqaqtavut taryuq naunaitkutaliurumapluta nayugainik, nauyunik, avugiingniiniklu naunaitkutanik aviktuqhimayumi tamaat qauyihaiplutiklu ikirahangnit kangiqhungnilu uumayuqaqpallianahugiyaptingnit.

2021-mi Ukium Nunngutaanut Naunaitkutat:

Mamianaqtuugaluq, aullaariamik ayuqhautiqaqtut huli qalakyuarnaq-19-mut talvuuna umiaqmit-havaghutik qauyihaiyaamik talvani RV Martin Bergmann-mit 2021-mi. Kihimi ungavaihimayugut ayuqnaittumik malrungnik atuqtaughaaqtunik kiahqhimayunik talvani Dease Ikirahanit imaqmiihhaaqtunik 2019-mit. Hapkua ungavaqtauhimayut umiaqtuqtunit talvani Sir Wilfrid Laurier havaktillutik taryumi August 10-mi, 2021. Tamangnik qauyihautit humaanngittut hanaqiyauniaqhutik ukiumi kiahqtitaungmiyughat 2022-mi. Havaqatigivaktaquttaug ikayuqtivut Iqaluktuuttiaqmi Qurluqtuqmilu qauyihaiyaamik kuukkanik tingmitjallu nayugainik. Mamianaqtuqtaug taimaa parnaiyaqhimayaqqut havaaghat

nutqaqtitauvaktut hilalungnirmut Qalakyuarnaq-19-miluunniit qaffiiqhutik. Havaqativut qauyihaiyi pulaaqhimayuq Qurluqtuqmut September 2021-mi havaqatigiyaamik kivgaqtiuyut Anguniaqtinit parnaiyaiyaamik qauyihaiyughanik Qurluqtum Kuugaanik talvanilu Iluilingmi ukiumi aullaqtitauyughaq (naunaitkutata ataaniittut).

2022-mi Parnaiyautit:

Umiaqmit-havaghutik Taryumit Qauyihaiyut: Aullaanginnarianikkumik Nunavunmut auyami 2022-mi, kihaqtittiyumayugut qauyihautinik imaqmiklu qauyihailuta umiaqmit talvanngat CCGS Sir Wilfrid Laurier talvanngalluunniit R/V Martin Bergmann. Hapkua havaariyauniaqtut talvani Ungahitangmi, Iluilingmi, Qingaungmi, Queen Maud Ikirahaanit, talvanilu Icebreaker Ikirahaanit, huliyaqhaqaqpallaangitpat, aullaarumayut talvunga Chantry Kangiqhuanut (St. Roch taamnalu Rasmussen Ikirahait), takughauyutut Piksaut 1-mi. Ihumagilluaqtaqqut 2022-mi taimaa havaghimmaariamik havaaghanit aullaqtitauhimayut 2017-2019-milu, talvuuna, qauyihaiyaghaqqut, qauyihautit, havauhiillu aajjikkutauniaqtut hivulliqmit tughirautinit.

Umiaqmit-havaaghat taryumi qauyihaiyunut aullaqtitauniaqtut akunngani August 1 2022, September 30-lu 2022-mi, taapkualu havaqatighat titiraqhimayut Naunaitkutaq 2-mi ataani. Tughirautauhimayut havaaghat 2022-mi taapkuanguyut: a) ungavailutik kihaqtittiffaaqlutiklu qauyihautinik atuqtaughaaqtughanik; taimaalu b) qauyihailugit pitquhiit avugiigniillu taryuq alruyaqtuqtunik qauyihautinik atuqhutik kiviipkaihimayunik umiaqmit imiqtaqhutik qauyihagtaghanik. Titiraqhimayutut hivulliqni tughirautinit, kihaqtitaghait ingilrutit tunngaviqarniaqtut ungavaqpagamik immap iluani kihaqhimayughat taryum natianit taimaa ungahiaqluni 15m-nik immap qaanganit. Aippiariit kihaqhimayughat qauyihautilgit harvam hakugingnianik qauyihaiyaamik hikuplu hilingnianik qauyihautiqahutiklu immap niklamanianik taryuqarnianik qunngiaqhugillu qauyihaghtait (qaumania, qaummaringnia, marlingania, qanuqlu).

Nunallaarnit-aullaqtihimayut Taryumik Qauyihaiyut: Havaqatiginaqhimayaqqut ikayuqtivut Qurluqtuqmi, Qingaungmi, Iqaluktuuttiaqmilu qauyihaiyaamik havaklutik 2022-2023-mi. Talvanitut 2021-2022-mi, havaqatigihimmaarahuaqtaqqut taapkua Qurluqtuqmi Anguniaqtit Naniriaqtuqtillu Katimayiit taapkualu Kaniitian Anguyaktit Ikayuqtiit Taryuqmi Naahuriyut katitiriamik ukiumit naunaiqhimaliqtainik kuukkamit taryumut aallatqiingniit talvanngat Qurluqtum Kuugaanit talvunga Coronation Ikirahaanut. Qauyihaiplutik katitiriniaqtut naunaiqhimaliqtainik pitquhiinik avugiingniiniklu atuqhutik tunngavilingnik qauyihautinik Qurluqtuqmi havaklutik upinngaghamit (February 2022) ukiuraaluk March-mut aippaagunnguqqat 2023-mi. Tallimaiqlutik 6-nikluunniit qauyihagtaghanik katitirilutik ukiuq atuqtillugu, hila nakuukpat aullaariamilu nangiarnaitpat. Ukiumi qauyihaivangniat sikiitukkut auyamilu havaklutik qayaqtuqhutik.

Havaqatiginaqhimayaqqullu taapkua Qingaungmi Anguniaqtit Naniriaqtuqtillu Katimayiit upinngaami kuukkamit-taryumut imaqmik qauyihaiyaamik Ayapapaktuq Kuugaanit Burnside Kangiqhua haniani. Hapkua havaaghakkut titirarumayut naunaiqhimaliqtainik hanguyumik pitquhiqtut (niklamanianik taryuqarnianiklu, itinianiklu) avugiingniillu (niqautit, alkaline,

nauyut paungit, avugiiktut uumaqutit) nanminiiniklu talvani kuukkam qaqhuanit talvunga kangiqhuanut hikuiqtinnagu.

Ukiumi munarivangniaqtaat taryum qanurininganiit Dease Ikirahaanit taapkua nunallaarmiutat ikayuqtiit Iqaluktuuttiaqmit, nangiarnaiqqat aullaariamik taryumi. Aullaaviginiaqtaat ikaaqlugu Dease Ikirahaat Kinngaaryungmit talvunga Itipliaryungmut talvungalu Ungahitangmut. Hapkua aullaaqtaghait taryumi qauyihaviginiaqtait hanguvianit hikukkut naunaiyariamik ukiumi qanurininganiit immap niklamania, taryuqarnia, avugiiktullu uumaqutit katiqhugait.

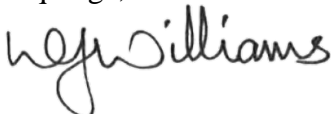
Havakvighaqqut ukiuraaluk aulaniaqmat, tughiraqtugut taimaa qauyihainiqmut laisiutiptingnit katitiriamik havaklutik talvani qulaani taihimayunit aviktuqhimayunit January 2022-mit December 2022-mut.

Ilttuqhitit:

Qauyihaviktugut atuqhugit taryuliyiyit ingilrutait ukiuraaluklu kihaqhimayukkut ihivriuriami taryumiutat Qitiqmiut Taryuutaanit, harvaqlu kuukkam imautaanit talvunga taryuqmut, tagyaaqtullu nirukittunit ikirahangnit. Ilihimmattiarumayaqqut harvait havaangillu aviktuqhimayumi uumayut, taimaa NRI-kut taapkualu Kanatami Ukiuqtaqtumi Qauyihaviat ayuqnaqtunik ilihimayaghanik hivituyumik uumayuutunik taryuqmik munaqhiyaamik qauyihaiyaamiklu.

Quanaqpiaqquhi ikayuqpakkaffi ihivriuqtaptangnik uqauhiqaruffilu tuharumainnaqtugut, pitquhimayunik, ihumagiyaptangniklu qauyihavut mighaagut. Quviahuinnaqtugut kiuhiaamik apiqhuutunik, hivayaqluta ihuariyakkut. Havaqatigiyaamik 2022-mi naahurittiaqqugut.

Titiraqtunga,



Dr. Bill Williams - Research Scientist

Fisheries and Oceans Canada
Ocean Sciences Division
Institute of Ocean Sciences
9860 West Saanich Road
Sidney, BC
V8V 4L1
Tel: (250) 363-6343
Fax: (250) 363-6690
Email: Bill.Williams@pac.dfo-mpo.gc.ca

Kivgaqtuqhugit havaaghanit ikayuqtigiit-PI-nguyut:

Bodil Bluhm, Professor, University of Tromso, Norway
Email: bodil.bluhm@uit.no

Kristina Brown, Research Scientist, Fisheries and Oceans Canada, Institute of Ocean Sciences
Email: Kristina.Brown@dfo-mpo.gc.ca

Eddy Carmack, Emeritus Research Scientist, Fisheries and Oceans Canada, Institute of Ocean Sciences, Email: Eddy.Carmack@dfo-mpo.gc.ca

Seth Danielson, Research Associate Professor, University of Alaska Fairbanks.
Email: sldanielson@alaska.edu

Brent Else, Assistant Professor, Geography, University of Calgary
Email: belse@ucalgary.ca

C.J. Mundy, Associate Professor, Biological Oceanography, University of Manitoba
Email: CJ.Mundy@umanitoba.ca

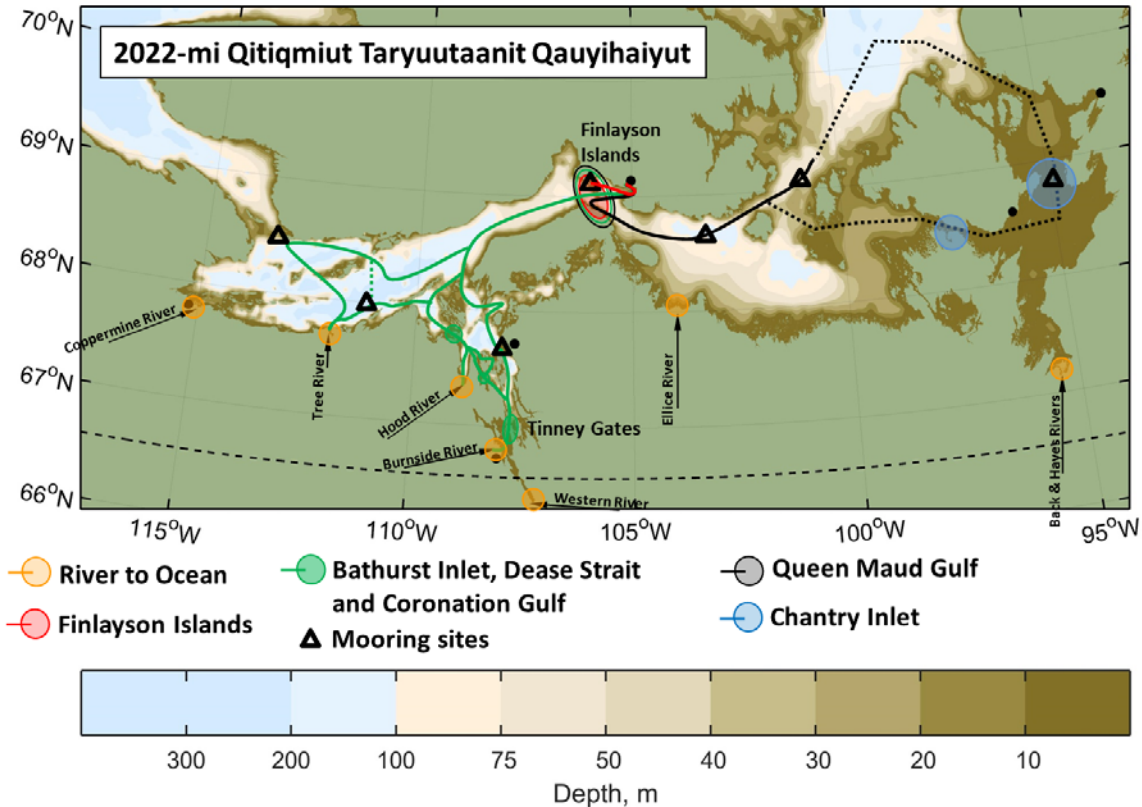
John Nelson, Research Scientist, Fisheries and Oceans Canada, Institute of Ocean Sciences,
Email: John.Nelson@dfo-mpo.gc.ca

Adrian Schimnowski, Executive Director, Arctic Research Foundation.
Email: adrian@arcticresearchfoundation.ca

Bill Williams, Research Scientist, Fisheries and Oceans Canada, Institute of Ocean Sciences, Email:
Bill.Williams@pac.dfo-mpo.gc.ca

Piksautit Naunaitkutallu:

1. Nunauyaq takupkaiyuq 2022-mi aullaaqvighaanik nayugaghaillu umiaqmit-havaanguyut taryumiutanik qauyihaiyut August 1, 2022-mit ahu 30 September 2022-mut.



2. Naahuriyauyut havaktitauyughat 2022-mi umiaqmit-havaktughanit taryumik qauyihaiyunik

01 August 2022 – 30 September 2022 (ubluit naunaitqniaquut)			
Ilauyukhaq	Havaakhaa	Havakviuyuq	Ilituhagakhaq Ihumagiyauluaqtuq
Bill Williams	Co-PI	DFO	Physical Oceanography
Seth Danielson	Co-PI	U. of Alaska Fairbanks	Physical Oceanography
Eddy Carmack	Co-PI	DFO	Ocean Ecosystem Concepts
Bodil Bluhm	Co-PI	U. of Tromso, Norway	Benthic Ecology
Kristina Brown	Co-PI	DFO	River and Ocean Geochemistry
John Nelson	Co-PI	DFO	Zooplankton
Brent Else	Co-PI	U. of Calgary	Carbon Dioxide Chemistry
Mike Dempsey	Technician	DFO	Mooring recovery/deployment
Chis Clarke	Technician	DFO	Mooring recovery/deployment
Shawn Marriott	Technician	U. of Calgary	Water sampling
Richard Sims	Postdoc	U. of Calgary	Carbon Dioxide Chemistry
Hank Statscewich	Student	U. of Alaska Fairbanks	Physical Oceanography