

Adaptive Management, Management Plans and Monitoring Programs

የኅድርበስና ፈሰራውን
ፈሰራውን በንግድና <ኋይ> በኅድር ፈተት
ሻይ በስናና ለመተዳደሪያ

Phase 2 Proposal / ማመልከት የሚከተሉ በርሃን

Public Hearing Iqaluit and Pond Inlet January 2021
Δມ່ລ້າໜົມສັງ ດັບຕັ້ງ ຮຸ່ມ ຕັ້ງກັນ 2021

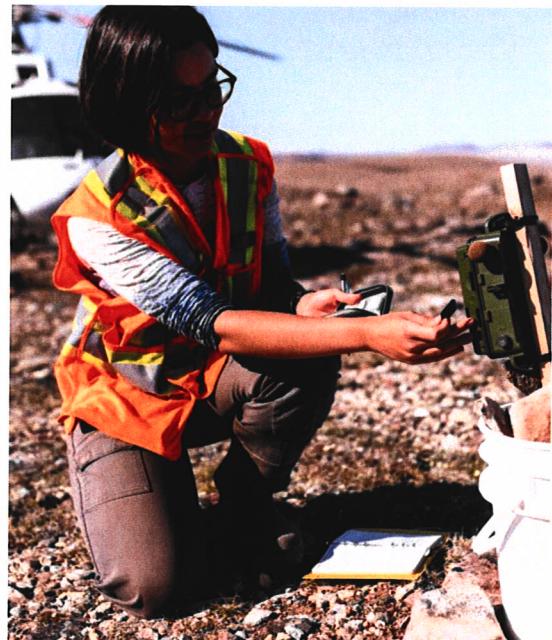


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Presentation Overview

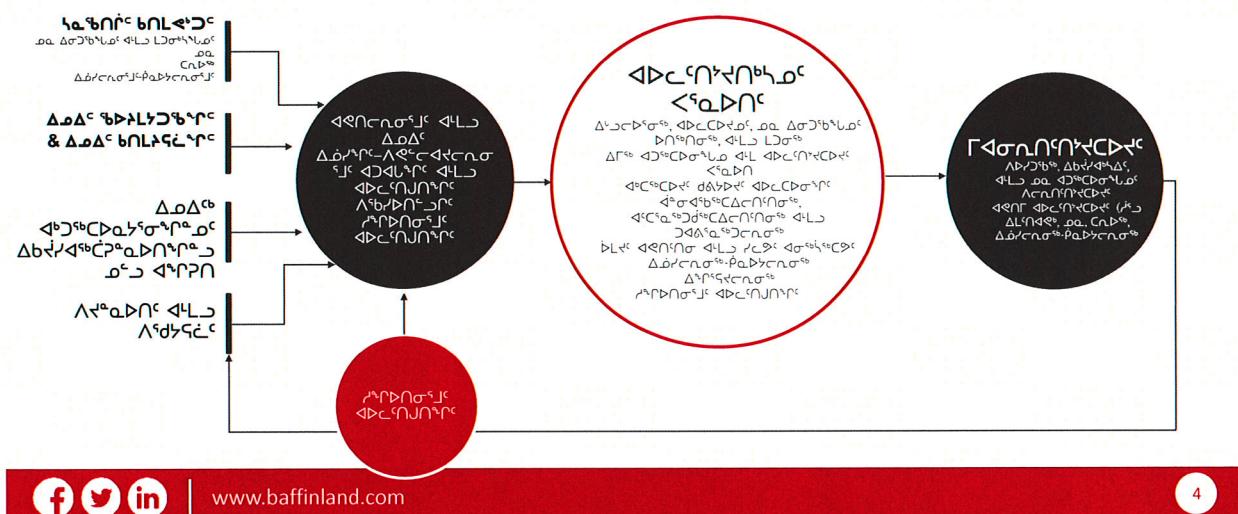
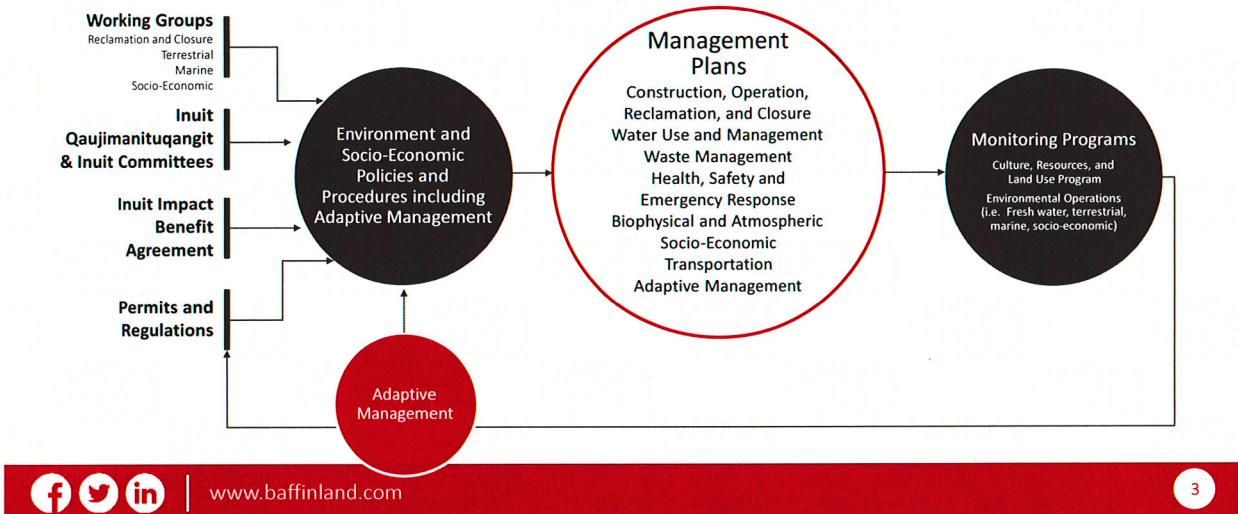
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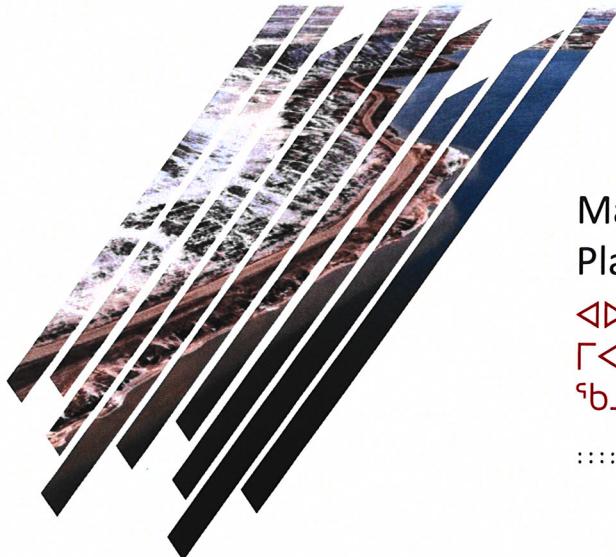


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Environmental Management System





Management and Monitoring Plans Summary of Updates



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Summary of Updated Management and Monitoring Plans

ይልኑ እንደሚገኘው የዚህ ስርዓት በአዲስ አበባ የሚከተሉት ደንብ ነው፡፡

- Construction, Operation, Reclamation and Closure Management Plans
▷ የፌዴራል ስራው አገልግሎት በኋላ ስራው ስርዓት ማስረጃ ይችላል
▷ የፌዴራል ስራው አገልግሎት በኋላ ስራው ስርዓት ማስረጃ ይችላል
 - Water Use and Management Plans
▷ የፌዴራል ስራው አገልግሎት በኋላ ስራው ስርዓት ማስረጃ ይችላል
 - Waste Management Plans
▷ የፌዴራል ስራው አገልግሎት በኋላ ስራው ስርዓት ማስረጃ ይችላል
 - Health, Safety, Emergency Response and Contingency Plans
▷ የፌዴራል ስራው አገልግሎት በኋላ ስራው ስርዓት ማስረጃ ይችላል
▷ የፌዴራል ስራው አገልግሎት በኋላ ስራው ስርዓት ማስረጃ ይችላል



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Summary of Updated Management and Monitoring Plans

የልአ እና ሂደት የልአ እና ሂደት ተስተካክለሁ

- Biophysical and Atmospheric Environment Plans
ሸጋጌልኩ ሰነድ ትርጓሜ አገልግሎት ማስተካከል
 - Socio-Economic Plans
አማካይ ሰነድ ትርጓሜ አገልግሎት ማስተካከል
 - Transportation Plans
ፖ.ስታኔንድ ሰነድ አገልግሎት ማስተካከል

Baffinland will update all management plans within 6 months of applicable regulatory approvals to reflect all commitments, terms and conditions and other regulatory direction.



Construction, Operation, Reclamation and Closure Management Plans

Construction, Operation, Rehabilitation and Closure Management Plan

Plan <u>Environmental Protection Plan</u>	Key Updates	Impact
	Air <ul style="list-style-type: none"> Additional dust suppression water sources 	<p>RC</p> <ul style="list-style-type: none"> Additional dust suppression water sources will reduce dust emissions during construction activities.
	Water <ul style="list-style-type: none"> Water quality monitoring during construction of the second ore dock Mitigation measure to minimize changes to the hydrologic drainage patterns Additional design considerations for culvert installation/replacement 	<p>ΔL^{ab}</p> <ul style="list-style-type: none"> Additional water quality monitoring will ensure water quality remains within acceptable levels throughout the construction period. Mitigation measures will help maintain the natural hydrologic drainage patterns to prevent environmental impacts. Additional design considerations for culverts will ensure they are installed correctly and do not cause further damage to the environment.
	Rail and Rail Safety <ul style="list-style-type: none"> Construction and operation of the North Railway Careful management of grading and excavation activities to protect thermal regime Caribou protection measures related to construction and operation of the railway Safety measures for rail crossings Safety features to increase the visibility of the railway crossings and increase safe use of the road 	<p>MLR^{ab}</p> <ul style="list-style-type: none"> North Railway construction and operation will be managed carefully to protect the thermal regime and minimize environmental impact. Caribou protection measures will be implemented to ensure the safety of these animals during construction and operation. Safety measures for rail crossings will be put in place to ensure the safe use of the road by drivers and passengers. Safety features will be added to increase the visibility of railway crossings and encourage safe use of the road.



Construction, Operation, Reclamation and Closure Management Plans

Δ¹Γ²Δ³Γ⁴, Δ¹Γ²Δ³Γ⁴, Δ¹Γ²Δ³Γ⁴Δ⁵, Δ¹Γ²Δ³Γ⁴Δ⁵Δ⁶



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Water Use and Management Plans

Water Use and Management Plans



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Waste Management Plans



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Health, Safety, Emergency Response and Contingency Plans

Health, Safety, Emergency Response and Contingency Plans
ડાયરેક્ટરી કાર્યક્રમ, કાર્યક્રમ કાર્યક્રમ, કાર્યક્રમ કાર્યક્રમ એલ.
ડાયરેક્ટરી કાર્યક્રમ, કાર્યક્રમ કાર્યક્રમ, કાર્યક્રમ કાર્યક્રમ એલ.

Plan ລາຍລະອຽດ	Key Updates	ລາຍລະອຽດ
Health and Safety Management Plan ຄວາມສົງລວມຂອງລາຍລະອຽດ ການຈັດຕະປັບສົງລວມ ທີ່ມີຄວາມສົງລວມ	<ul style="list-style-type: none"> Alignment with Emergency Response Plan and inclusion of most recent safety plans 	<ul style="list-style-type: none"> ຕະຫຼາມການສົງລວມ ການຈັດຕະປັບສົງລວມ ທີ່ມີຄວາມສົງລວມ
Emergency Response Plan ຄວາມສົງລວມ ການຈັດຕະປັບສົງລວມ	<ul style="list-style-type: none"> Site plans to address new facilities Reporting requirements under Transportation Safety Board Regulations added (i.e. railway occurrences) 	<ul style="list-style-type: none"> ໄລຍະສົງລວມ ດ້ານການ ກຳນົດການ ສອງຕະຫຼາມ ການຈັດຕະປັບສົງລວມ ທີ່ມີຄວາມສົງລວມ
Spill Contingency Plan ຄວາມສົງລວມ ການຈັດຕະປັບສົງລວມ	<ul style="list-style-type: none"> Location and details of new fuel storage and spill response equipment Additional facilities (i.e. site layouts) and proposed changes to operations Inclusion of rail-based emergency response, and current explosive storage quantities Updated MSDS inventory Inclusion of potential railway spill scenario (i.e. railway lubricants/oil spill) 	<ul style="list-style-type: none"> ຄວາມສົງລວມ ດ້ານການ ກຳນົດການ ຖ້ານີ້ ກຳນົດການ ດ້ານການ ກຳນົດການ ດ້ານການ ກຳນົດການ ດ້ານການ ກຳນົດການ ດ້ານການ ກຳນົດການ

* QIA will jointly approve both Baffinland adaptive management objectives, indicators, thresholds and responses listed in this plan. /PPC-CG Delta
Baffinland Management Plan/



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Health, Safety, Emergency Response and Contingency Plans



 Baffinland

Biophysical Environment Plans

▷ՏՐԱԾԵՖԱԾԾՈՎՔԵՆԵՐԸ ◀◀ՈՒՐԸ <ԾՈՒՐԸ



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Baffinland

Socio-Economic Plans

Socio-Economic Plans

* QIA will jointly approve with Baffinland adaptive management objectives, indicators, thresholds and responses listed in this plan. ⁹⁹ ¹⁰⁰ ¹⁰¹ ¹⁰²



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* QIA will jointly approve with Baffinland adaptive management objectives, indicators, thresholds and responses listed in this plan.



New Plans for Phase 2 Proposal





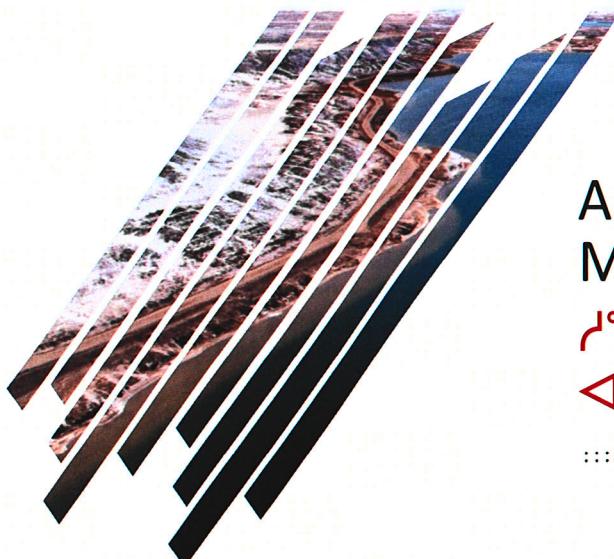
New Plans for Phase 2 Proposal

۲۰۱۶-۱۷۰۸-۰۹-۰۷



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Adaptive Management



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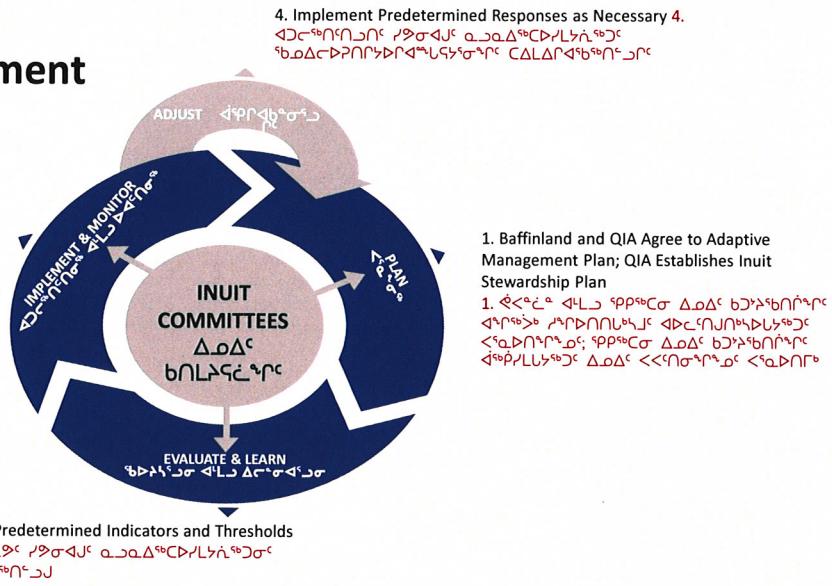
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Adaptive Management

3. QIA Implements Inuit Stewardship Plan Monitoring Programs

3. $\Delta\text{B}^{\text{C}}\text{C}^{\text{D}}$ $\Delta\text{A}^{\text{C}}$ $\text{B}^{\text{C}}\text{A}^{\text{D}}$ $\text{B}^{\text{C}}\text{A}^{\text{D}}$ $\text{B}^{\text{C}}\text{A}^{\text{D}}$ $\text{B}^{\text{C}}\text{A}^{\text{D}}$



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Adaptive Management Phases, Components and Mechanisms

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Adaptive Management Phases, Components and Mechanisms

ՀՐԴՈՐԸ ԼԸ ՀՊԼՈՅՐԸ ՏԱյրար, ՏԵՇՐԸ ԳԼԵ ՀՊԼՈՅՐԸ



Adaptive Management Phases, Components and Mechanisms

Adaptive Management Processes, Components and Mechanisms



Adaptive Management Phases, Components and Mechanisms

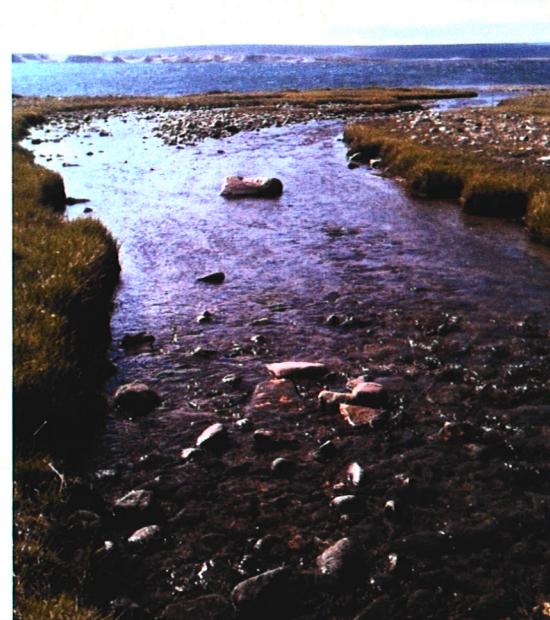
Adaptive Management Phases	Components	Proposed Adaptive Management Mechanisms
Adjust / አማካይ መመሪያ	Addressing unanticipated effects or issues	Action and resolve unanticipated effects or issues
	Revising strategies and responses	Revise management strategies and responses to enhance effectiveness
	Reporting on adaptive management strategies and responses	Report on new and revised strategies and responses per requirements, as defined in the management plan
	Scheduled updates	Update the management plan per scheduled updates as identified in the management plan





Fresh Water ΔΓ¢ΩΔ¢

- Type 'A' Water Licence
‘ນോഡ്യൂല് അ’ അനുബന്ധം
- Aquatic Effects Monitoring Plan
അലീറ്റ് എറ്റാടാൻ സാമ്പത്തിക വിവരങ്ങൾ
- Phase 1 Environmental Effects Monitoring Study
ഐംപിസ്റ്റിക് കോംപാനി ഫൈസിൽ ടെക്നോളജിസ് അസോസിയേഷൻ
- Core Receiving Environment Monitoring Program
കൊർഡ് ഏറ്റാപ്പേര് ടെക്നോളജിസ് അസോസിയേഷൻ
- Lake Sedimentation Monitoring Program
ക്ലീം ഡിഫെൻസ് ടെക്നോളജിസ് അസോസിയേഷൻ



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Fresh Water ΔΓ¢ΩΔ¢

- Dustfall Monitoring Program
ഡസ്റ്റഫല്ല് മാനേജ്മെന്റ് പ്രോഗ്രാം
- Initial Stream Diversion Barrier Study
ഓഫീഷിലീ സ്റ്റ്രീം ഡിവെൻഷൻ ബാർഡർ സ്റ്റുഡി
- Fisheries Authorizations
ഫീഷറീസ് ആര്ഥോറേറ്റേഷൻ
- Monitoring programs to align with adaptive management indicators and thresholds
ഡാറ്റാസൈറ്റുകളിൽ നിന്നും മാറ്റുമെന്തും നിന്നും നിന്നും നിന്നും നിന്നും



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Atmospheric የረጋገጫ

- Atmospheric Environmental Mitigation and Monitoring Plan / ፊርማ ማጥቃሪያ ደረሰኑ አገልግሎት በሚገኘውን ስራውን የሚከተሉ ስራውን የሚከተሉ ስራውን የሚከተሉ ስራውን
 - Six meteorological stations
አዲስ ሌሎች ደረሰኑ ማስተካከለ የሚገኘውን የሚገኘውን የሚገኘውን
 - Continuous on-site air quality monitoring
የሚገኘውን ስራውን የሚገኘውን የሚገኘውን
 - Seasonal off-site air quality monitoring
የሚገኘውን ስራውን የሚገኘውን የሚገኘውን



Atmospheric የረዳናርኩል

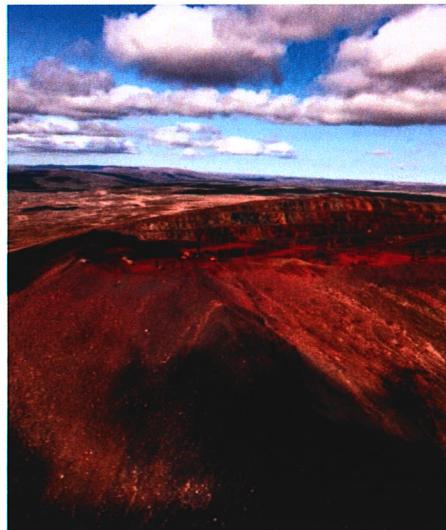
- Atmospheric Environmental Mitigation and Monitoring Plan / የሸፍና ማስተካከል አገልግሎት በቅርቡ የሚያስፈልግ ይችላል
 - Monthly dustfall samples ተመክቷል የ> ተመክቷል የ> ተመክቷል የ>
 - Noise monitoring at accommodations የ> የ> የ>





Atmospheric የረጋዊነት

- Air Quality and Noise Abatement Plan
አይሸና ለወጥና ፍጥረት ስላምናናልናብርርስናን
ይኖራለሁ
- Meteorology
የረጋዊነት
- Air quality monitoring
አይሸና ለወጥናዚ ምርመራ ማስተካከል
- Noise and vibration
ስላምናናልናውን ማስተካከል
- Monitoring programs to align with adaptive management indicators and thresholds
ወጥናውን ምርመራ የሚያስፈልግ አይሸና ተመልከት ይችላል
የሚገባውን ምርመራ የሚያስፈልግ አይሸና ተመልከት ይችላል



Terrestrial እሳት

- Terrestrial Environmental Mitigation and Monitoring Plan / እሳት ፍቅር መመሪያ
የሚገባውን ምርመራ ማስተካከል
- vegetation monitoring
አይሸና ምርመራ
- birds monitoring
በኩረት ምርመራ
- terrestrial wildlife monitoring
አይሸና ምርመራ
- Monitoring programs to align with adaptive management indicators and thresholds
ወጥናውን ምርመራ የሚያስፈልግ አይሸና ተመልከት ይችላል
የሚገባውን ምርመራ የሚያስፈልግ አይሸና ተመልከት ይችላል





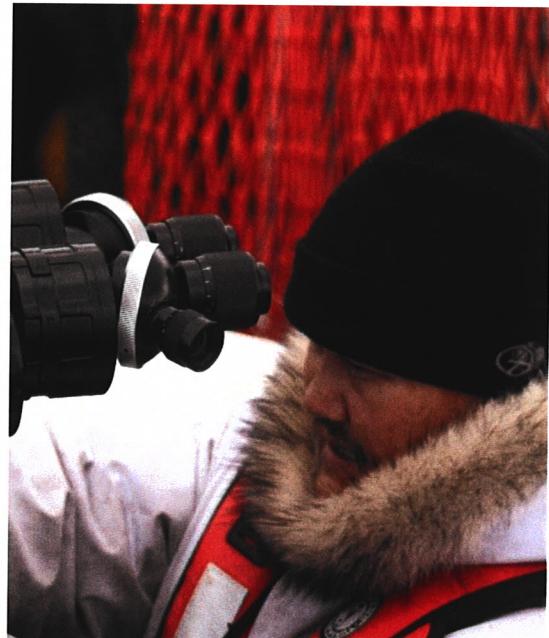
Terrestrial ئەرەپىق

- Terrestrial Environment Working Group
ئەرەپىق ئەنلىكىسىم ئەرەپىق
- Strengthening of Terms of Reference
ئەرەپىق ئەنلىكىسىم ئەرەپىق ئەنلىكىسىم



Marine ئەندە

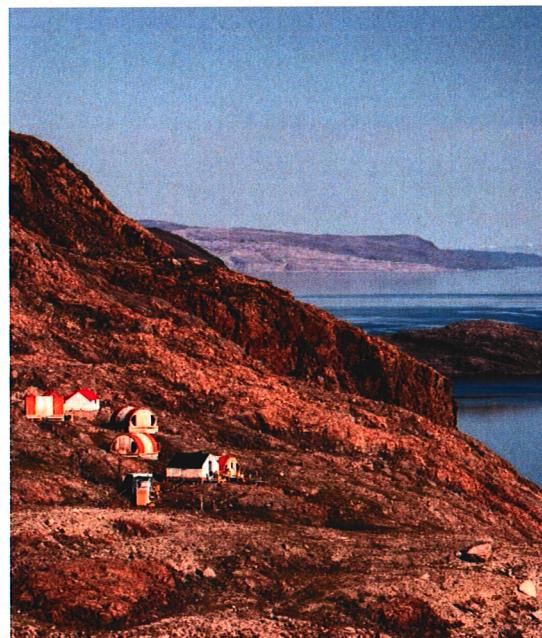
- Marine Environment Working Group
ئەندە ئەنلىكىسىم ئەرەپىق
- Strengthening of Terms of Reference
ئەرەپىق ئەنلىكىسىم ئەرەپىق
- Fisheries Authorization
ئەندە ئەنلىكىسىم ئەرەپىق
- Marine Monitoring Plan
ئەندە ئەنلىكىسىم ئەرەپىق
 - benthic habitat / ئەندە ئەنلىكىسىم ئەرەپىق





Marine
CnD^{cb}

- sediment quality / Δέβას C ፊዜስትሮስ
 - water quality / ΔLብናር ፊዜስትሮስ
 - finfish species / Δቶኑል
 - non-native species / CLደኋገናር>CDወጥር ንጽና
 - marine mammals (ship-based, shore-based, aerial, and acoustic) / >Δያር (>ገጽናው<ጥር, ሁኔታዎች,
ይናገድ ተከራካሪ ማረጋገጫ)
 - Monitoring programs to align with adaptive management indicators and thresholds
አዲበሱስና ለርሃና ዘመንና ስምምነት የሚኖሩ ማረጋገጫ
ፈጸመበት ለማስተካከለ የይናገታዎች የጠቅላላ ማረጋገጫ
የሚከተሉ የሚገኘው



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Socio-Economic አፈርጋዊ የዳንጋጌዎች

- Mary River Socio-Economic Monitoring Working Group
መડናቸው ሰሞኑርያን የዕድልናውያን
ተፈጻሚነት ለማድረግ
 - Qikiqtaaluk Socio-Economic Monitoring Committee
ቅክቃልኩ ሰሞኑርያን የዕድልናውያን
ተፈጻሚነት አገልግሎት



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Socio-Economic Δ&ΓΣΝΩΣ& - ΡΕΔΙΛΣΝΩΣ&

- Socio-Economic Monitoring Plan
አዲርናንስ ስርዓት የሚፈልጉትን ንግድ ጥያቄ ይኖር ይፈጸም
 - Population Demographics
አገልግሎት ማረጃዎች
 - Education and Training
አገልግሎት ማስተካከያዎች ለእነዚህ ንግድ ይኖር
 - Livelihood and Employment
አዲርናንስ ስርዓት የሚፈልጉትን ንግድ ለማስተካከያ ይኖር
 - Contracting and Business Opportunities
ክፍል የሚፈልጉትን ንግድ ለማስተካከያ ይኖር
 - Human Health and Well-Being
አዲርናንስ ስርዓት የሚፈልጉትን ንግድ ለማስተካከያ ይኖር



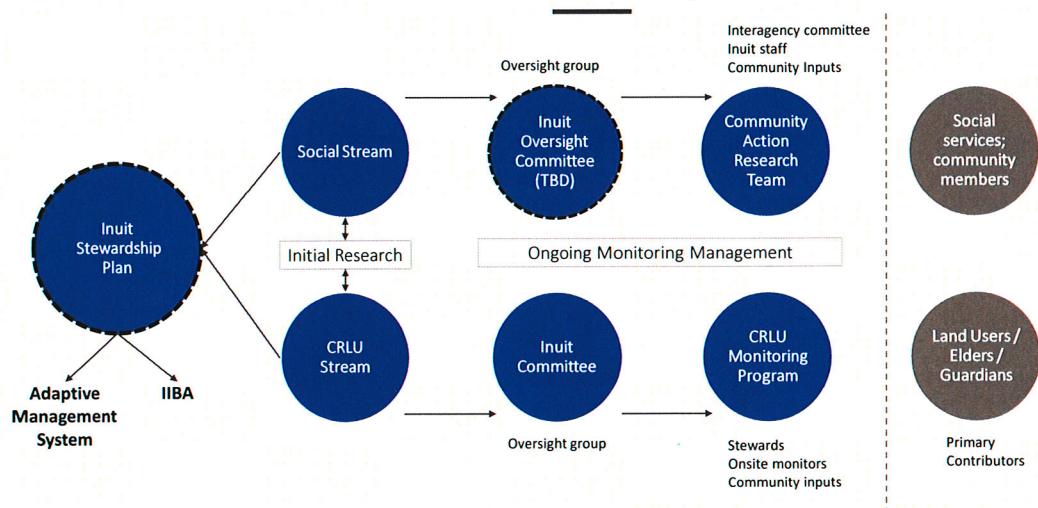
Socio-Economic አፈርጋዊ-ምዕራልዊ

- Community Infrastructure and Public Services
መርመሪያ የዕለታዊ ፈተሬት ስራውን ለማስቀመጥ
 - Resources and Land Use
ልክቶች ስራውን ምግባር አገልግሎት
 - Economic Development and Self-Reliance
የቅረቡች በቅርቡ ስራውን ምግባር የቅረቡች በቅርቡ ምግባር
 - Benefits, Royalty, and Taxation
ልክቶች የክፍያ ማስቀመጥ, ምግባር ስራውን ምግባር ሰነድ
 - Monitoring programs to align with adaptive management indicators and thresholds
ዳንብዎች ማስቀመጥ ለመሳሪያ የሚገኘው የሚገኘውን ምርመራ ለማስቀመጥ
ምንም ማስቀመጥ የሚገኘውን የሚገኘውን ምርመራ ለማስቀመጥ
ይህንን በማዘጋጀነት ማስቀመጥ ይችላል እና የሚከተሉት የሚከተሉት የሚከተሉት የሚከተሉት የሚከተሉት

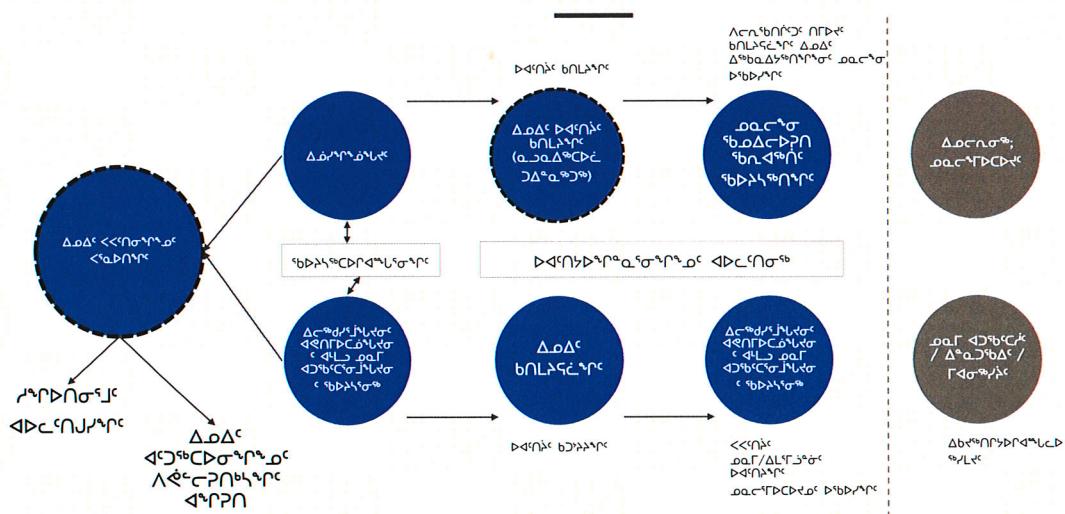




Inuit Stewardship Plan



$\Delta \sigma \Delta^c << \cap \sigma^a \Gamma^a \Delta^c < \cap \Delta \Gamma^a \Gamma^c$



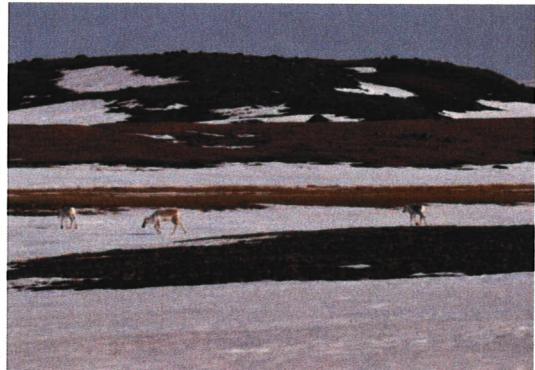


Summary



Summary

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Summary

- Environmental monitoring is ongoing
▷▷▷▷▷ ተፈጻሚነት አፈጻጸም
• Updates identified through the Phase 2 Proposal review and Working Groups
ርዕስላዊ ዴሞክራሲያዊ ሪፐብሊክ ገዢ መመሪያ እና ስራ
አድራሻ የጥና የሚያስተና ለመከተል የሚከተሉ ይገልጻል
• Increase Inuit participation in monitoring programs, including leadership in CRLU and social monitoring
▷▷▷▷▷ ደንብ ማስረጃ ሲሆን የሚያስተና የሚከተሉ ይገልጻል
የሚከተሉ የሚያስተና የሚከተሉ ይገልጻል



Thank you
‘דְּבָרָא גָּוֹדֶן

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