

# NIRB Monitoring Update

## Kitikmeot Region



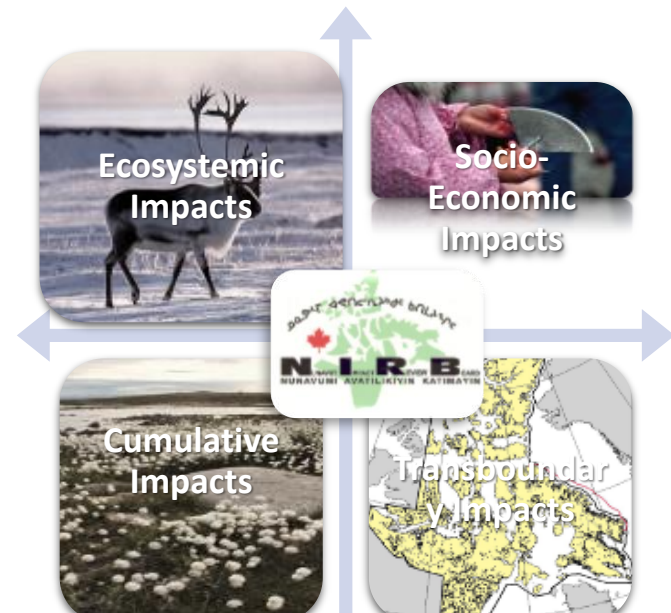
# Hunaugamik Nunavut Avatiliqinikkut Katimayit?

Timiuyut kitunuliqaak  
kavamaliqiniuyut amiqhaiyut  
avatingnut aktuqtaunikkut  
ihivriuqtauningit havaariyauyumayu  
tukhiutit Nunavunmi

*Turaarutaa: Hapumminahuarlugit  
akhuurnahuarlugillu inuuhanit  
haffuminngat avatingnut  
Nunavunmiunullu aktuqtaunianut  
ihivriurnikkut pivallieeningit*

An institution of public government responsible for environmental impact assessment of proposed projects in Nunavut

*Mission: To protect and promote the well being of the environment and Nunavummiut through the impact assessment process*





# NIRB PROCEDURES AT MEETINGS

- **Please be aware NIRB staff have not left the NU/NWT travel bubble to get here.**
- In respect of the GN's Public Health Orders, the NIRB will:
  - Follow the GN's Public Health recommendations for:
    - Encouraging hand washing
    - Maintaining 2 meters physical distancing
    - Avoiding handshakes and embracing others
    - Covering a cough, and
    - Regular use of hand sanitizers
  - Respect the maximum persons allowed for indoor gatherings
  - Manage people in and out of the room to ensure the appropriate limits are not exceeded
  - Limit refreshments to bottled water
- Non-medical masks will only be required if physical distancing cannot be maintained.
- If you have any concerns or questions, please approach us about them as soon as possible.

Our primary concern is the safety of everyone involved!



# Nakuutqiyahiuqtut Munariyaghait Monitoring Responsibilities

NIRB

- Naunaitkutanik tuniqhainiq
- Ihivriughiyut Ukiuq Nunngutaanut Naunaitkutanik
- Havakvingnut pulaaqtut
- Ukiuq nunngutaanut naunaitkutat ilitturihimayainik
- Katimayiit pitquhimayait

# Havaaghaliuqtuq

- Naunaiqhiti himmaaqtut NIRB-kunnut
- Ukiuq Nunngutaanut Naunaitkutut
- Nakuutqiyahiuqtut Atannguyallu Parnaiyautait
- Pilutik pihimalugillu angiqtauhimayut
- Naunaiqhitiyut laisitaqvingnik

# Ataniqtuqtuiyut Havakviit

- Tuniqhaivaktut piinnaraliutiniḱ angiqhivaghutiklu
- Ilittuqhitivaktut havaaghanit lhulutiniḱ
- Malittiariaghainiḱ munaghivaktut

NIRB

- Information distribution
- Review of Annual Reports
- Site visit(s)
- Annual report of findings
- Board recommendations

# Proponent

- Ongoing reporting to NIRB
- Annual Report
- Monitoring and Management Plans
- Obtain and maintain authorizations
- Reporting to licensing agencies

## Authorizing Agencies

- Issue authorizations and approvals
- Report on project Effects
- Monitor Compliance







# Doris North



- 2006: Havaaghanut Iitaqhitjutinik / Project Certificate #003
- 2016: Ihuaqhaqtauhimayut Havaaghanut Iitaqhitjutit / Amended Project Certificate
- 48 Uqauhiq Maliktaghaqlu Terms and Conditions



# Hope Bay Phase 2



- 2018: Havaaghanut  
Ilitaqhitjutinik / Project  
Certificate #009
- 86 Uqauhiq  
Maliktaghaqlu / Terms  
and Conditions



























# 2018





# 2019





# 2018





# 2019

































# Socio-Economic Summary 2019

- \$10.8 Million to KitIA/NTI/KC
- \$1.6 Million GN taxes
- \$204.1 Million in contracts, \$91.5 Million Inuit-owned businesses
- 598 Workers
  - 78 Inuit (63 Kitikmeot) – 9-12% of workforce
  - 11% Women - 3% Inuit Women
  - \$30.8 Million salaries - \$2.5 Million to Inuit
  - 7,754 hours of training to Inuit workers



## 2019 NIRB Recommendations

Recommendation	Rating	Comments
1. Update on Camera Monitoring	Complete	TMAC provided update to the NIRB regarding the camera monitoring program.
2. Report on dustfall monitoring and comparison with other projects.	Incomplete	Information was not provided.



# NIRB's 2020 Evaluation of the Hope Bay Projects

Indicator	Rating	Comments
Air Quality	Satisfactory	Recorded dustfall within project predictions
Wildlife	Satisfactory	Recorded interactions with wildlife are low, and the site is dealing with interactions well.
Marine Environment	Good	Regular training carried out on spills. Installation of outfall pipe completed but not used.
Fuel/Chemical Spills	Needs Improvement	Spill response on reportable spills is good, however small non-reportable spills needs reduction.



# NIRB's 2020 Evaluation of the Doris North Project

Indicator	Rating	Comments
Site Appearance	Good	The site is well-organized and neat.
Water	Good	No significant issues identified. Containment of contact water is carried out, ponds well-maintained. Silt fences in use when necessary (Madrid)
Ground Disturbance	Good	Operations confined to approved footprint.
Socio-economic topics	Needs Improvement	Inuit employment at 10% of total workforce in normal conditions remains low.



# COVID-19

- All Nunavut employees sent home
- Site closed to the public
- Workers monitored and tested
- Operation slowdown
- Some projects needing many people deferred



# Questions?





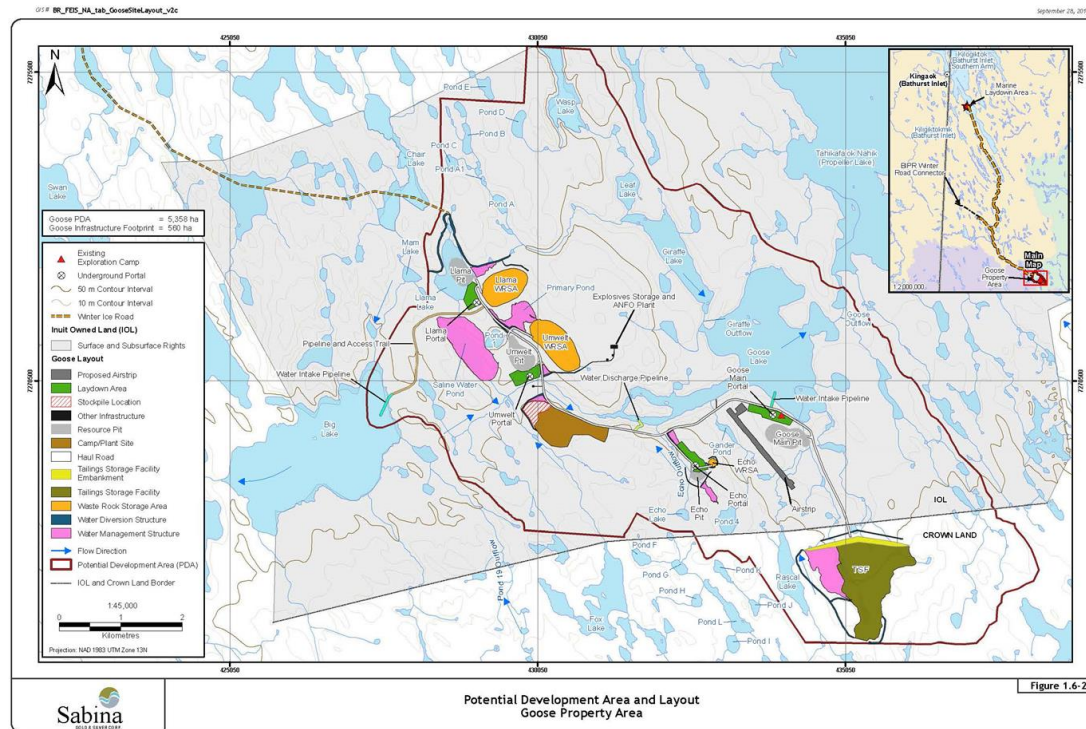


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## Back River Gold Mine Project Overview

- 400 km south of Cambridge Bay
- Four mining areas within the Goose Property
  - Umwelt, Llama, Goose Main and Echo
  - Open pits and Underground mines
- Phases:
  - Construction: 4 years
  - Operations: 10 years, Projected 350,000 oz of gold
  - Reclamation / Closure: 8 years
  - Post Closure Monitoring: 5 years

## Hanningayuk Kuugaa Kuulu Uyaraqtarvik Havaaq Nainaaqhimayuk

- 400 km hivuraanit Iqaluktuutiarmit
- Hitamat uyaraqtarviuyut nunami iluaniittut Goose Nanminiriyaani
  - Umwelt, Llama, Goose Main and Echo
  - Angmaumayuk hauvikhangit unalu nunami iluaniittut uyaraqtarvit
- Ilanganit:
  - Igluqpiliurniq: 4 ukiungani
  - Aulapkainninga: 10 ukiunganit, Havaariyayukhaq 350,000 oz kulunit
  - Himmauhirninga/Umigutaa: 8 ukiungani
  - Kinguani Umigutaa Munariyayukhat: 5 ukiungani



# Previous Board Recommendations

## Reporting

- The Board reminds Sabina Gold and Silver Corporation to track and submit its plans and reports by the deadlines outlined in the Project Certificate and provide updates as required while advancing into the construction phase for the Project.

- Reporting has improved.
- Did require extra time to respond to reviewers comments on 2018 annual report.

## Vegetation Monitoring

- The Board requests that, until the full monitoring program is operational, Sabina Gold and Silver Corporation provide an outline of its vegetation monitoring program and any associated revegetation activities that were completed this year within the Proponent's 2018 annual report to the Nunavut Impact Review Board.

- In 2018 a vegetation field survey conducted.
- Vegetation Monitoring Plan has been developed and will be implemented once the Project enters Construction Phase.
- PC. T&C No.36 within three (3) years from commencement of construction revegetation strategies to be developed.



# Winter Road



Photos Courtesy of Sabina Gold and Silver Corp.



# Goose Lake





# Goose Lake Exploration Trenching



Photos Courtesy of Sabina Gold and Silver Corp.





# Fuel Tank Farm / Fuel Storage





# Uuyagaaktakvik Quarry





# Munariniq Monitoring





# Imarmiunut Tulagvikhaat Ininga Marine Laydown Area



## Anginiqhautaa Havaaq Ilaliutingit – Imarmiunut Tulagvikhaat Ininga

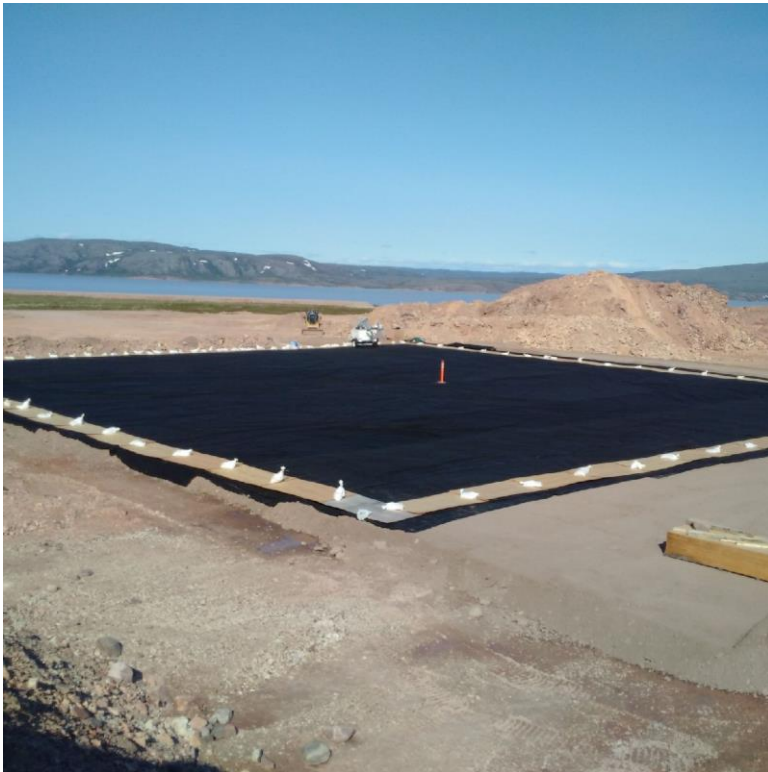
- Auyaq Agyaqtuiyut
- Tulagvia maniraa
- Urhuqyuaqarvingit
- Uuyagaaktakvik
- Iglukakviit
- Milvinga
- Ukiuq Upqutaa uvunga Goose Tahiq

## Major Project Components – Marine Laydown Area

- Summer Sealift
- Laydown yard
- Fuel tank farm
- Quarry
- Camp
- Airstrip
- Winter Road to Goose Lake



# Imarmiunut Tulagvikhaat Ininga - Urhuqyuaqarvingit Marine Laydown Area – Fuel Tank Farm



Photos Courtesy of Sabina Gold and Silver Corp.



# Imarmiunut Tulagvikhaat Ininga - Iglukakviit Marine Laydown Area - Camp





# Imarmiunut Tulagvikhaat Ininga - Milvinga

## Marine Laydown Area – Airstrip





# 2020 Modification Package

- Ilaglaqni aktilanga tamna Goose mittaqlua talvanga 1,500 miitat taphuminga 47 miitat (5,000 taphuminga 150 itigait) talvunga 1,800 taphuminga 61 miitat (6,000 taphuminga 200 itigait);
- Ilagiani aktilangi Tariuqmi Iliuqaqvik (MLA) mittaqlua talvanga 915 miitat taphuminga 47 miitat (3,000 taphuminga 150 itigait) talvunga 1,500 taphuminga 61 miitat (5,000 taphuminga 200 itigait);
- Iliuqaqlua tuapaliaq avataani mikhaani 15 kilaamitat (km) manittumi nunani tahamuna Ukiumi Apquta akungani Tariuqmi Iliuqaqvik tamnalu Goose;
- Ilaglaqlua imaq atuqtaunia talvani Goose talvanga 502,000 m<sup>3</sup> talvunga 822,450 m<sup>3</sup> ukiumun;
- Ilaglaqlua imaq atuqtaunia hikumi apqutmun hanayaunia ihuaqhihimanialu talvanga 675 m<sup>3</sup> atuni kilaamitat talvunga 2,025 m<sup>3</sup> atuni kilaamitat;
- Increasing the size of the Goose airstrip from 1,500 m by 47 m (5,000 by 150 feet) to 1,800 by 61 m (6,000 by 200 feet);
- Increasing the size of the Marine Laydown Area (MLA) airstrip from 915 m by 47 m (3,000 by 150 feet) to 1,500 by 61 m (5,000 by 200 feet);
- Placing aggregate over approximately 15 kilometers (km) on rough terrain along the Winter Ice Road between the MLA and Goose;
- Increasing water use at Goose from 502,000 m<sup>3</sup> to 822,450 m<sup>3</sup> annually;
- Increase of water use for ice road construction and maintenance from 675 m<sup>3</sup> per km to 2,025 m<sup>3</sup> per km;



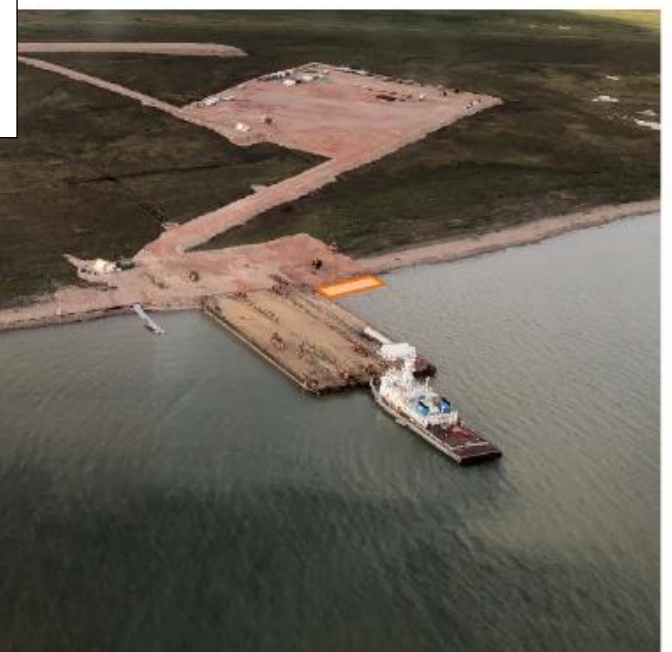
# 2020 Modification Package

- Ilagiaqnia iqakut uyaqat aktilanga talvunga 59 talvunga 86.6 milian tansit inilik tahamanitauq katitlugu tupliraqnia;
- Himauihiqu pingahut (3) atullaktut irininaqtunut uqauaqmiuvit tahamuna Ukiumi Apquta atuinaqtukhanik irininaqtunut hiniktaqvut;
- Atuqni mikiyut kaivyariktut qiratangittut huylut taphumunga Tariuqmi Iliuqaqvik tariungiyaivia immiqtuqvua kuviraqvialu tamnavalungittuq angiqtaqhimagyuq atuinartuq huylut; tamnalu
- Uigunia talvunga Tariuqmi Iliuqaqvik hinaani tunngavik mikhaanut 41 miitat takinia, 5.5 miitat talvunga 9.5 miitat hanimuktunia tamnalu 2 miitat ibyunia.
- Increase of waste rock volume from 59 to 86.6 million tonnes located on the same total footprint;
- Replacement of three (3) temporary emergency shelters along the Winter Ice Road with permanent emergency camps;
- Usage of small diameter flexible pipe for MLA desalination plant intake and discharge instead of approved permanent pipes; and
- Extension to MLA shoreline pad approximately 41 m long, 5.5 m to 9.5 m wide and 2 m depth.





**Image 5.1-1. Existing MLA Shoreline Pad Demonstrating Current Gap between Barge and Pad**



**Image 5.1-2. Proposed MLA Shoreline Pad Extension (in orange) adjacent to the existing MLA Shoreline Pad, looking West**



## Socio-Economic Summary

- Inuit Impact Benefit Agreement (IIBA) signed April 2018
- Inuit Employment (2019)
  - 310 employees worked at the project ,
  - 49 (16%) of which were Inuit
- Contracting (2019)
  - \$27.1 million in expenditures
  - 59% of total made to 86 northern businesses including Kitikmeot Qualified Business



# 2019 Report Card

## EVALUATION OF THE PERFORMANCE OF SABINA'S BACK RIVER GOLD MINE

Indicator	Rating	Comments
Wildlife	Good	<ul style="list-style-type: none"><li>▪ Wildlife Mitigation and Monitoring Program</li></ul>
Water	Good	<ul style="list-style-type: none"><li>▪ Type A Water Licence approved (November 2018)</li><li>▪ 2018 baseline sampling conducted (Aquatic Effects Monitoring Plan)</li><li>▪ Risk and Emergency Response Plan</li><li>▪ Water Management Plan</li></ul>
Vegetation	Good	<ul style="list-style-type: none"><li>▪ Some damage due to ice-road use</li><li>▪ Pre-shipment equipment cleaning protocol in place to reduce invasive plant introduction</li></ul>
Marine Environment	Good	<ul style="list-style-type: none"><li>▪ First sealift (August 2018)</li><li>▪ Shipping Management Plan, Marine Monitoring Plan, Oil Pollution Emergency Plan</li></ul>
Community Engagement	Good	<ul style="list-style-type: none"><li>▪ Back River Project Update – Kitikmeot Community Tour – May 2019</li><li>▪ Community Liaison Officer</li><li>▪ SEMC – reported other engagements throughout year</li><li>▪ Inuit Environmental Advisory Committee</li><li>▪ Plans provided (Business Development Plan, Community Involvement Plan, Human Resources Plan, Socio-Economic Monitoring Plan)</li></ul>
Inuit Hire/Contracting	Good	<ul style="list-style-type: none"><li>▪ 16% Inuit hire</li><li>▪ Preferential contracting opportunities for Kitikmeot Qualified Businesses</li></ul>



# COVID-19

- All Nunavut employees sent home
- Site closed to the public
- Workers monitored and tested



# Questions?





# Jericho

2020 Annual Monitoring Update  
NIRB File No. 00MN059



# Jericho Diamond Mine Project

## Uyagakhiuktit Havaangit

- Approximately 240km SE of Kugluktuk /  
Haniani 240 km-nik ungahiaqtuq  
hivuraanit kivalliqhianit Qurluqtum
- Single Open Pit Mine / Avaliittuq  
Hauyauyuq Uyaraghiuqvik
- Processing Facility / Amiqhaiqarviuyuq
- Processed kimberlite containment areas  
/ Hiqupluqtiqhimayut kimberlite-mik  
tutquumaviat
- Camp and Supporting Buildings /  
Hiniktarviat Atuqtauyullu Ikluqpait
- Fuel Tank Farm / Urhuqyuaqarvingit
- Airstrip / Milvinga
- Roads connecting infrastructure /  
Apqutit atatapkaiyut ikluqpangnik





# Initurlinga Qanuritpa

- July 2004 – Tahapkuat NIRB tunivhiymayut Havakhautikhanik Naunaitkutak Atugakhanik Nungudjutilingnik Ubluinik Nunguumaanut Atuknianut Naunaitkutak 002 tahapkununga Tahera Katimayit.
- January 2005 – Havaaghanut Titirautit 002 nuutitauyut talvunga Benachee Resources Inc-kunnut
- August 2010 – Shear Diamonds (Nunavunmi) Kuapuriissat niuviqtaat Jericho-kut
- August 2011 – NIRB-kut nuutittiyaat Havaaghanut Titirautit 002 talvunga Shear-kunnut
- October 2012 – Havakvik umiktikaffuktauhimayuq Shear-kunnit
- January 2014 – AANDC qimaktauyluqitigiyaat havakvik munaliquhugulu
- September 2016 – NIRB-kut ihivriuqhimayait INAC-kut “Jericho Uyaraghiuqviarik Aulapkaittiarniqmut Havaaghainik”
  - Amihut havaangit iniqtauhimayut auyami 2017-mi
  - Ikittut havaaghait iniqtauuyughat huli auyami 2018-mi
- NIRB-kut pulaaqhimayait Havakviat June 2018-mi





# Project Certificate **Iltaridjutaa** [No. 002] Compliance Summary

- Proponent is not compliant with Project Certificate [No. 002]
- No updates from the Proponent
- CIRNAC has assumed management role





# CIRNAC's Site Stabilization Project (File No. 16UN058)





# CIRNAC's Site Stabilization Project (File No. 16UN058)





## Course kimberlite cover on processed kimberlite tailings

Hiqupluqhimayunik kimberlite-mik qaanganunngaqhivaktut  
hiqupluqtiqpaalliqhimayunik kimberlite-nik





## Fuel Tanks - Cleaned and Emptied, Contaminated soil - liner, berm, and capped

Uqhughat Qataryuit – Halummaqtihimayut imaiyaqtauplutiklu,  
Kuvivihimayuuq nuna – hittiriipkuhiqtihimayuuq,  
kingighilaaqhimayullu, matuliqtauplutiklu





## Breach of Divider Dyke A and West Dam to allow for natural water flow

Ahikkuuqtittiyut Aviktuqviat Dyke A Uataanilu  
Haputiliuqhimayuq imaq qurluriami





Removal of C1 Diversion Ditch  
Breach of Pit Wall to re-route water into Open Pit  
Outflow from pit lake into Carat Lake

Ahivaiyut taapkuninga C1 Ahikkuuqviat Hauyauhimayuq  
Ahikkuuqtittiyut Taluanik ahikkuuqtittiyaamik imaqmik Angmaumayumut  
Uyaraghiuqvingmut  
Anialattiyut uyaraghiuqviup tahiraanit talvunga Carat Tahianut





# Ihumagiyatit Ihumagiyaulluaqtut! Your Ideas are Important!

Taminnut naunaitkutit Inuit Qaujimajatuqangit ihumagiyaulluaqtut NIRB'nut  
General information and Inuit Qaujimajatuqangit is important to the NIRB!

# Qanuq ilaunginnarialiuvit?

- ❖ Ihivriuqlugit TMAC-kut ukiuq nunngutaanut naunaitkutait
- ❖ Tunilugit titiraqhimayut uqauhiit apiqhuutillu
- ❖ Hivayaqlugu NIRB-kut havakviat akiittukkut hivayautaat Havaaghat mighaagut unipkaarutigilugu havaktiptingnut



## How can you get involved?

- ❖ Review TMAC's annual reports
- ❖ Submit written comments and questions
- ❖ Phone the NIRB's office toll-free to talk about the Project with our staff





Qanuq ilitpaalliqniaqqit NIRB-kut qauyihagtainik?  
How can you learn more about NIRB's assessments?

- Inuit Titiraqviat
    - Qiniqluhi havaaghaqnik titiraqmikluuniit
    - Atiliqtuqtauluhi naunaitkutanik tuniyauqattariami
  - Tatqiqhiut
    - Aulayut havaaghat umikvighaillu
- Public Registry
    - Search for project or document
    - Register to receive notifications
  - Calendar
    - Active projects and deadlines





# Questions?



Thank You -Koana!