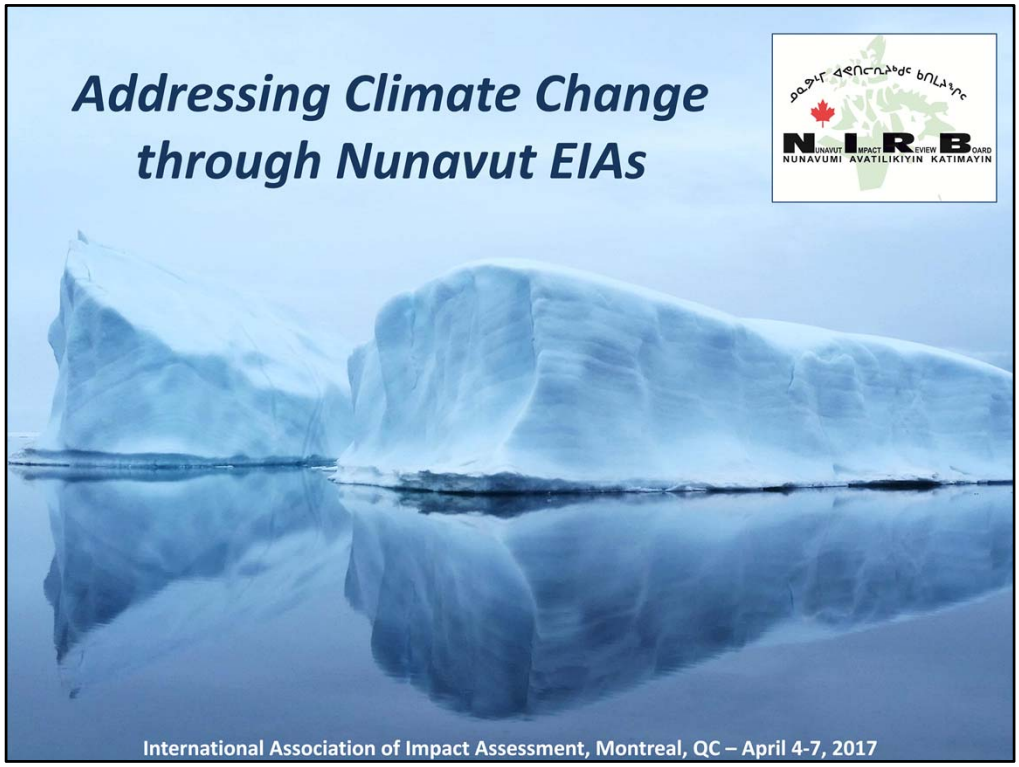
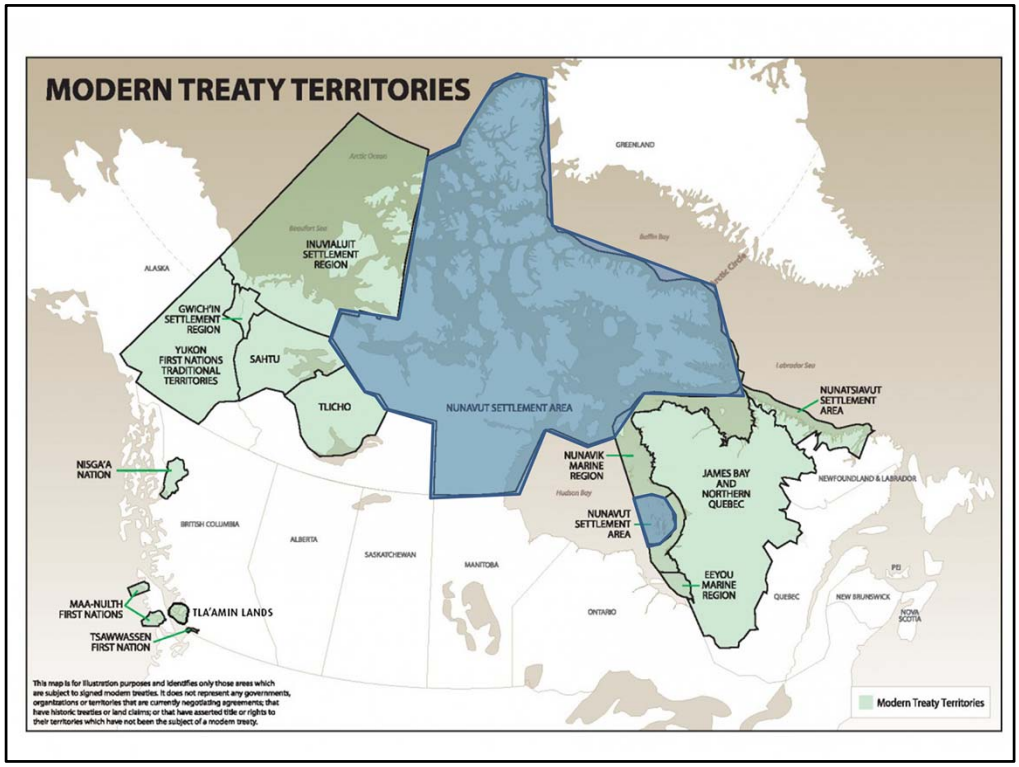
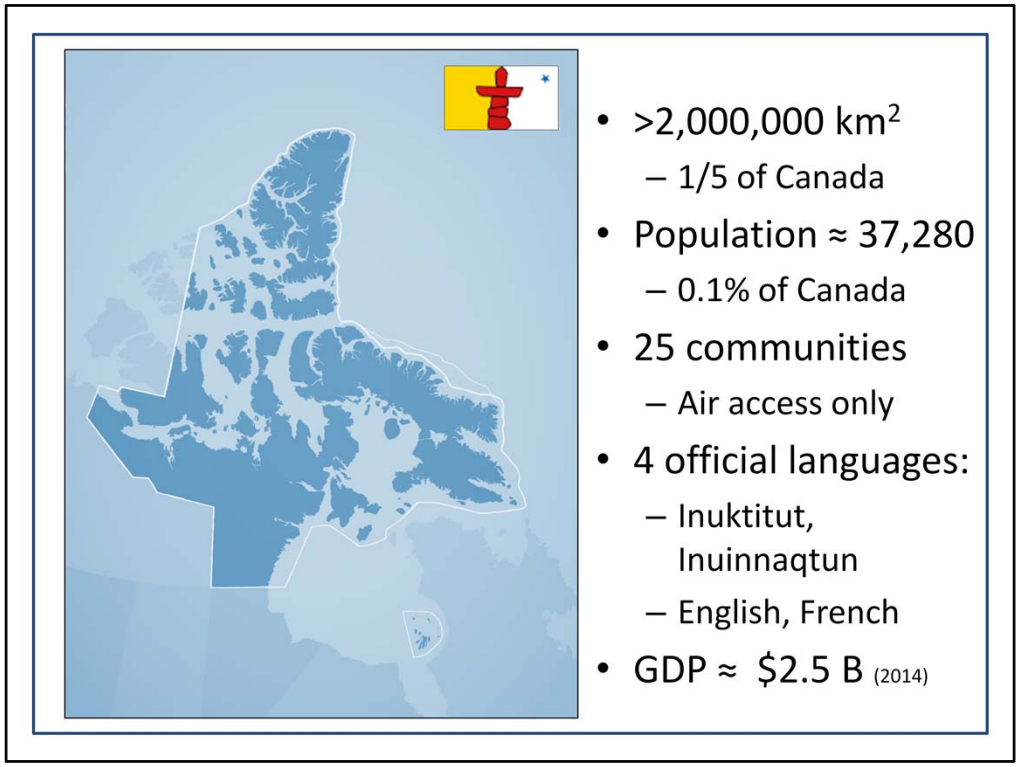


Thank you very much to the organizers of this session for inviting me to join the panel and offer some perspectives on behalf of the Nunavut Impact Review Board regarding the challenge of effectively addressing climate change through the environmental assessment process in Nunavut.

I'll attempt to provide some background on the impact assessment regime for Nunavut, where it originates from, how it works, and what issues specific to climate change has it been challenged to address.

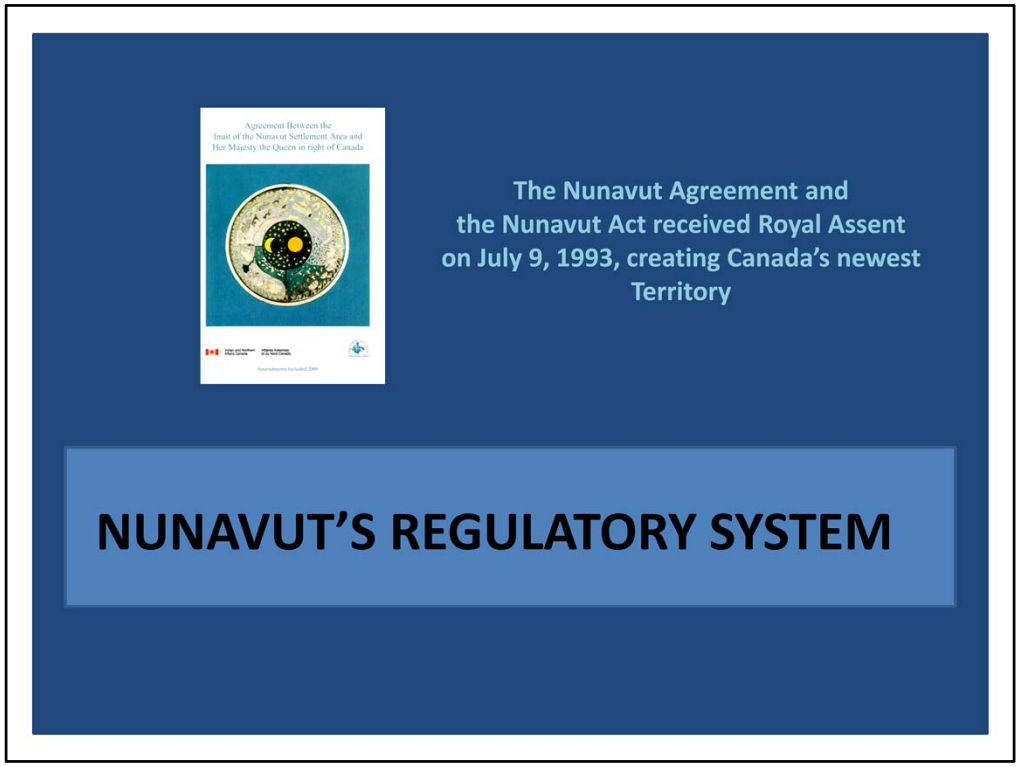


As you are no doubt aware, Canada has a number of settled and unsettled land claims agreements with its indigenous peoples, particularly in the northern reaches of the country. The territory of Nunavut came into being in 1996 and is unique for being covered by one comprehensive land claims agreement negotiated for by the Inuit of the Nunavut Settlement Area.

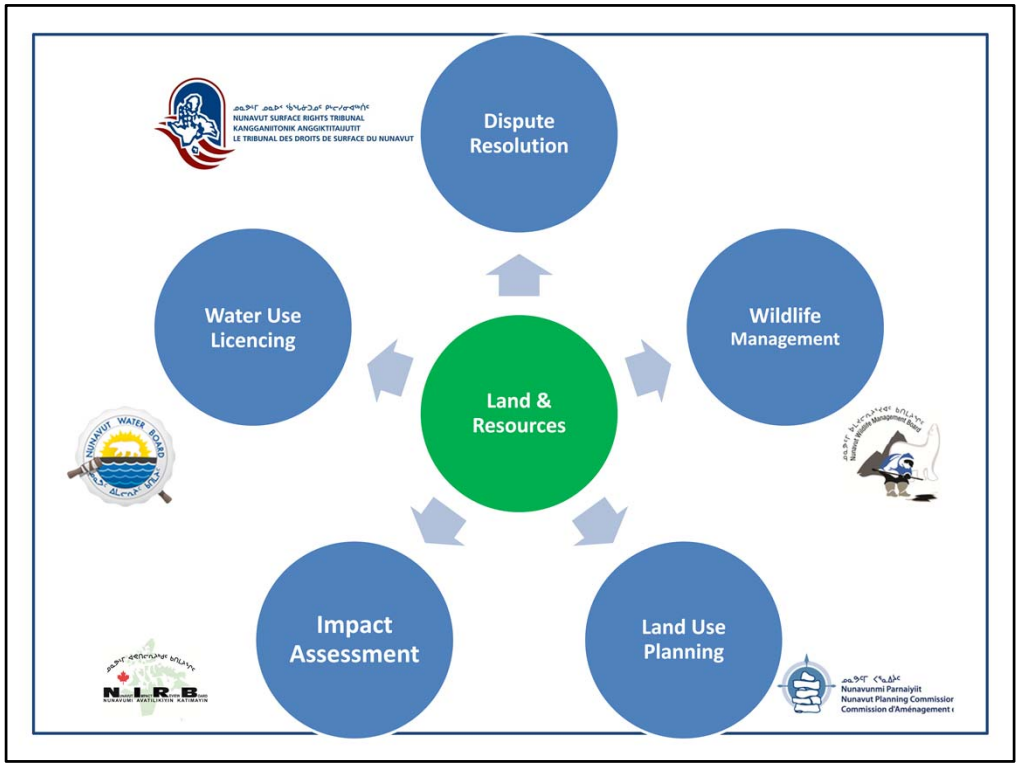


Nunavut is unique within the landscape of Canada, and this has direct effects on our regulatory system. It's a vast geography, over 2 million square kilometers of total area, spanning 3 time zones and consisting of arctic and sub-arctic environments. We have less than 0.1% of the Canadian population spread out over 25 communities occupying approximately one-fifth of Canada's land mass.

There are no roads connecting any of Nunavut's communities to one another or to the rest of Canada; the cost of living is extremely high.



Through the Nunavut Agreement, Inuit received defined rights and benefits in exchange for surrender of any claims, rights, title and interests based on their assertion of an aboriginal title.

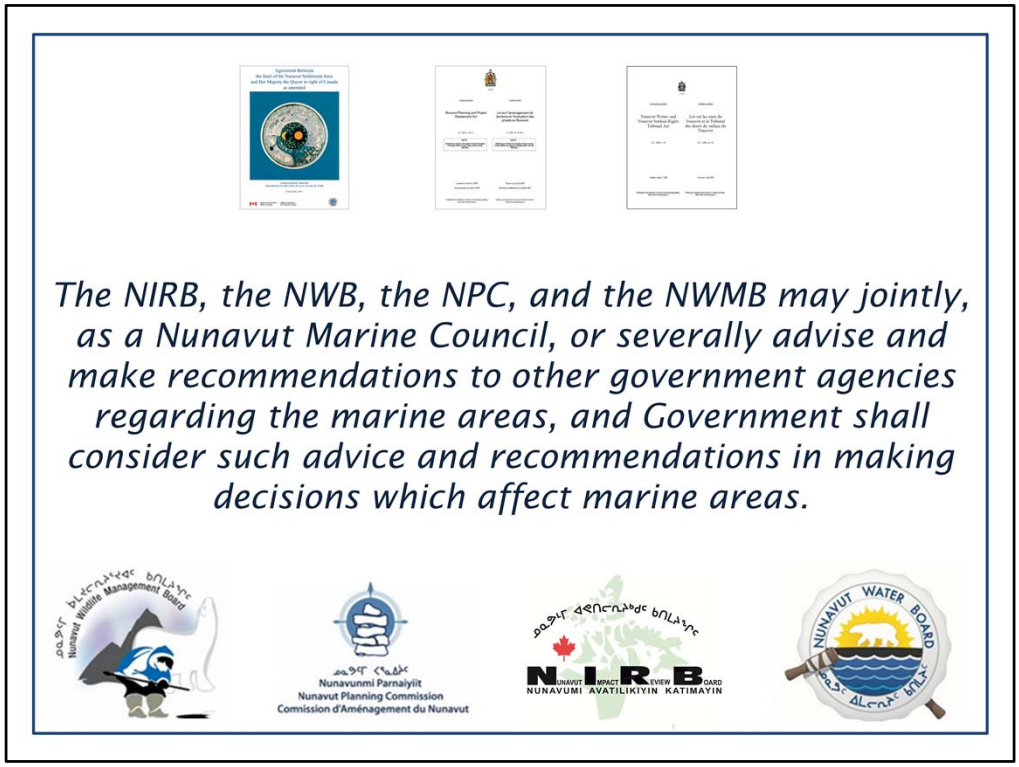


The Nunavut Agreement established an integrated resource management system for the whole of the Nunavut Settlement Area, a vast area of land and marine waters rich in both natural resources (such as minerals, oil and gas) and renewable resources (such as fish and wildlife).

Importantly, the Nunavut Agreement established a requirement for the formation of a public government for Nunavut and 5 independent institutions of public government with a role in land and resource management.

These institutions were structured in a co-management fashion with representation from the Designated Inuit Organization, the Government of Nunavut and the Government of Canada. For example, the NIRB has up to 9 members, 2 which are directly appointed by the Government of Nunavut, 2 that are directly appointed by the Government of Canada, and 4 that are appointed by the Government of Canada on recommendation by Nunavut Tunngavik Incorporated. A chairperson is then nominated by the board itself and appointed through the Government of Canada.

Once appointed, all members act as independent decision-makers and the Board itself operates at arms-length from Government.



In addition to the individual mandates of the Nunavut institutions of public government, there is an ability for each organization to independently advise Government directly on marine management issues.

Alternatively, acting together as a Nunavut Marine Council these organizations may speak with one voice for issues affecting Arctic marine areas, capitalizing on shared knowledge and experience in land use planning, impact assessment, and wildlife and water management.

Nunavut Regulatory System

Development proposals must satisfy requirements of:

- Land use planning
- Environmental Impact Assessment
- Water and Land Use Licensing

Processes governed by specific federal legislation:

- Nunavut Agreement (Articles 10-13)
- Nunavut Waters and Nunavut Surface Rights Tribunal Act
- Nunavut Planning and Project Assessment Act

Focusing on the regulatory system applicable to resource development projects, we have separate institutions that are responsible for land use planning, environmental impact assessment, and water licensing. The integrated nature of the system requires varying levels of coordination amongst these Boards, which is ensured through specific provisions of the Nunavut Agreement and our respective enabling legislation.

I should also note that the Canadian Environmental Assessment Act previously applied in Nunavut and was removed through an amendment to the Nunavut Agreement in 2008, which rendered the NIRB the sole environmental assessment authority for the Territory.

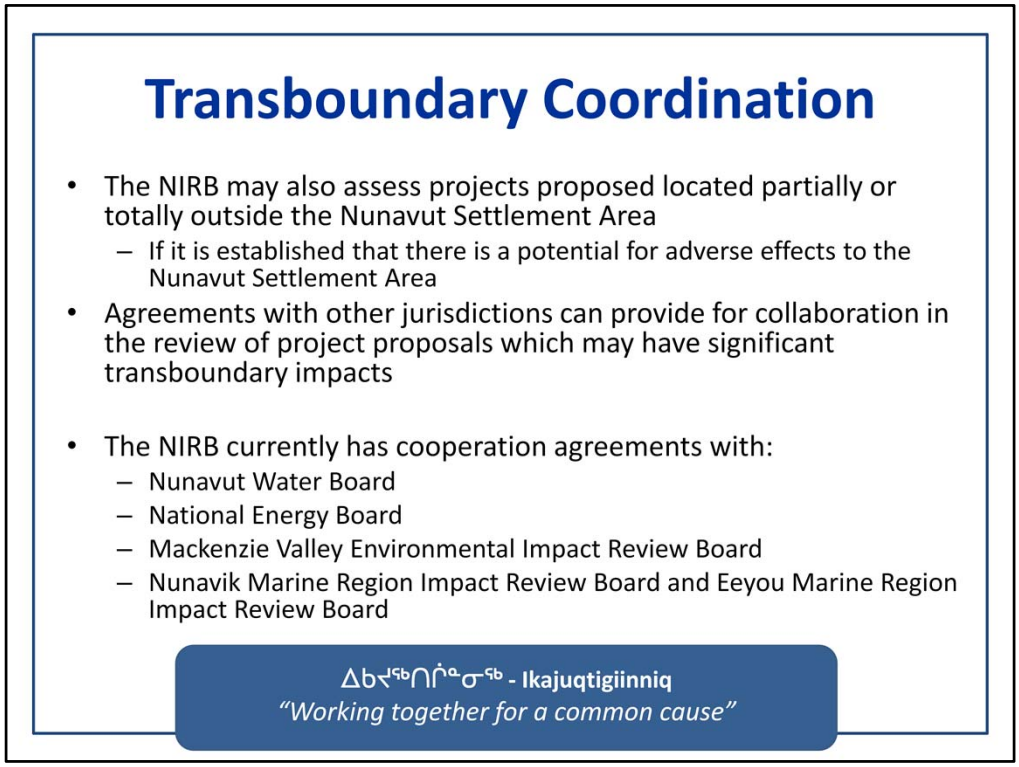
Nunavut Impact Assessment

- Screen project proposals to determine whether or not a review is required
- Gauge and define the extent of regional impacts
- Review ecosystemic and socio-economic impacts of project proposals
- Determine whether project proposals should proceed, and if so, under what terms and conditions
- Monitor projects that have been approved to proceed

NIRB compliance monitoring and effects monitoring allow for feedback into ongoing impact assessments

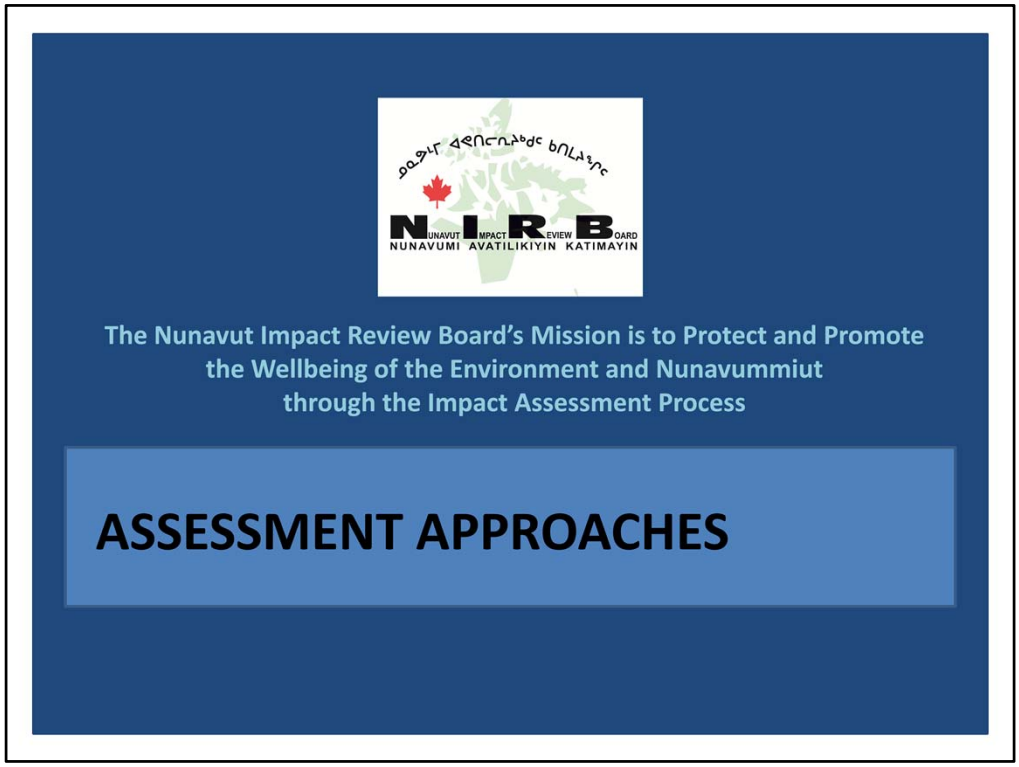
Through this regulatory regime the Nunavut Impact Review Board (NIRB) has been conducting environmental impact assessments since 1996. The NIRB screens project proposals to determine whether or not a full review is required, gauging and defining the extent of regional impacts by reviewing the potential biophysical, social and economic effects of project proposals.

The Board determines whether projects should proceed, and if so, under what terms and conditions, providing these recommendations to Government Ministers responsible for final decision-making. The NIRB also has a role in monitoring projects that have been screened or reviewed and approved to proceed.

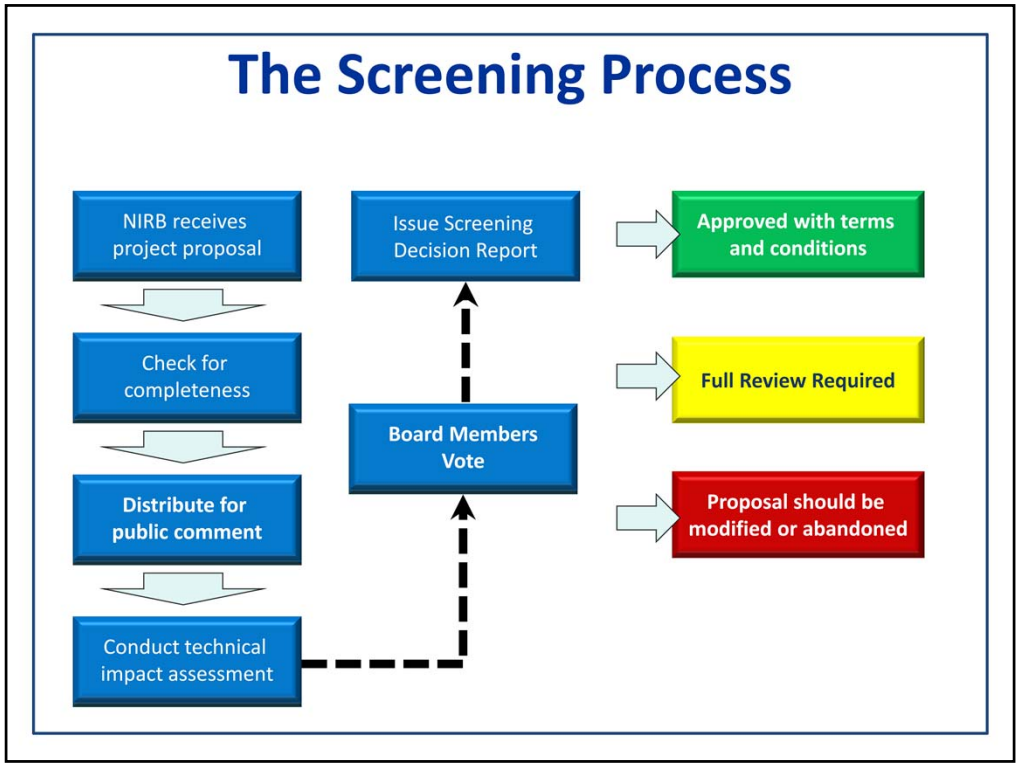


The Nunavut Settlement Area sits adjacent to a number of other jurisdictions, including the Northwest Territories, Saskatchewan, Manitoba, Northern Quebec and Labrador. The NIRB communicates regularly with assessment authorities outside of Nunavut regarding projects with potential transboundary effects or public concern, and there are specific legislative provisions which can allow for the assessment of transboundary projects by the NIRB.

The NIRB presently has memorandums of understanding in place with several such transboundary groups to allow for continued open communications and sharing of technical expertise and advice.

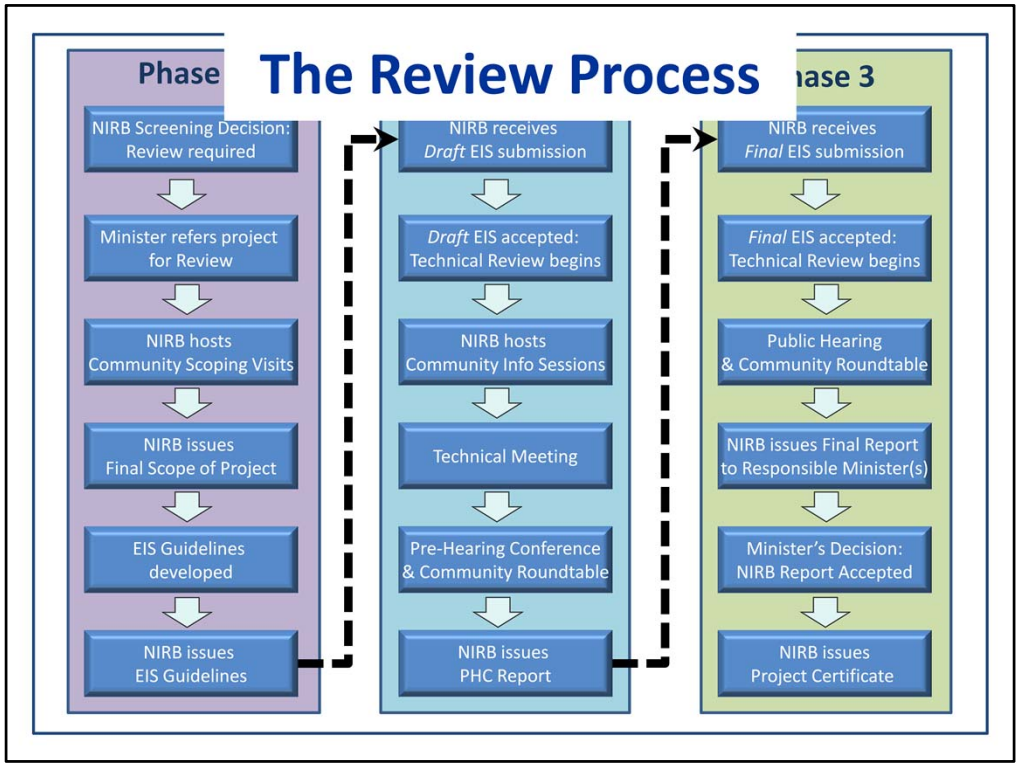


Next I will briefly touch on the project-specific assessment processes administered by the NIRB, before highlighting recurring issues associated with climate change that we've been encountering through these processes in recent years.



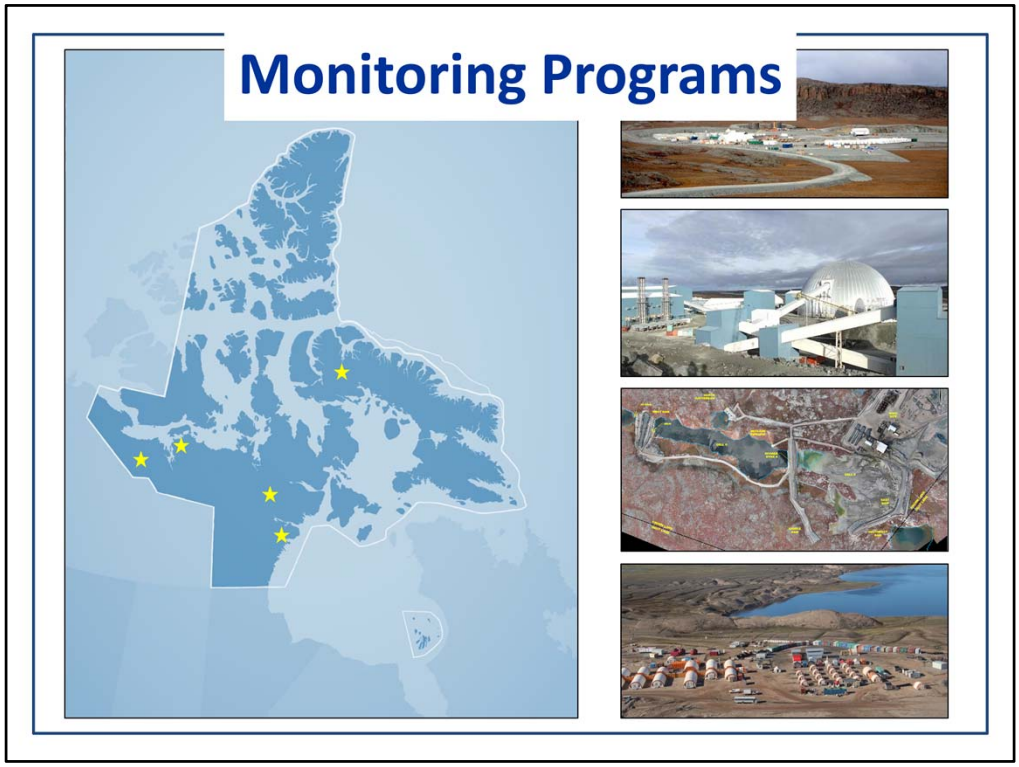
The NIRB conducts a screening level assessment of all project proposals referred to it by the Nunavut Planning Commission. The objective of screening is to determine whether or not a full environmental review is required by considering the potential for adverse biophysical, social and economic effects to occur. The screening process takes up to 45 days to complete and includes a public commenting period and public release of a final decision report by the Board at its conclusion.

Possible outcomes of this process include determining that the project should be approved with specific terms and conditions, or determining that a full environmental review is required – this option is typically reserved for major development projects only. Finally, the Board may also determine that a proposal should be modified or abandoned.



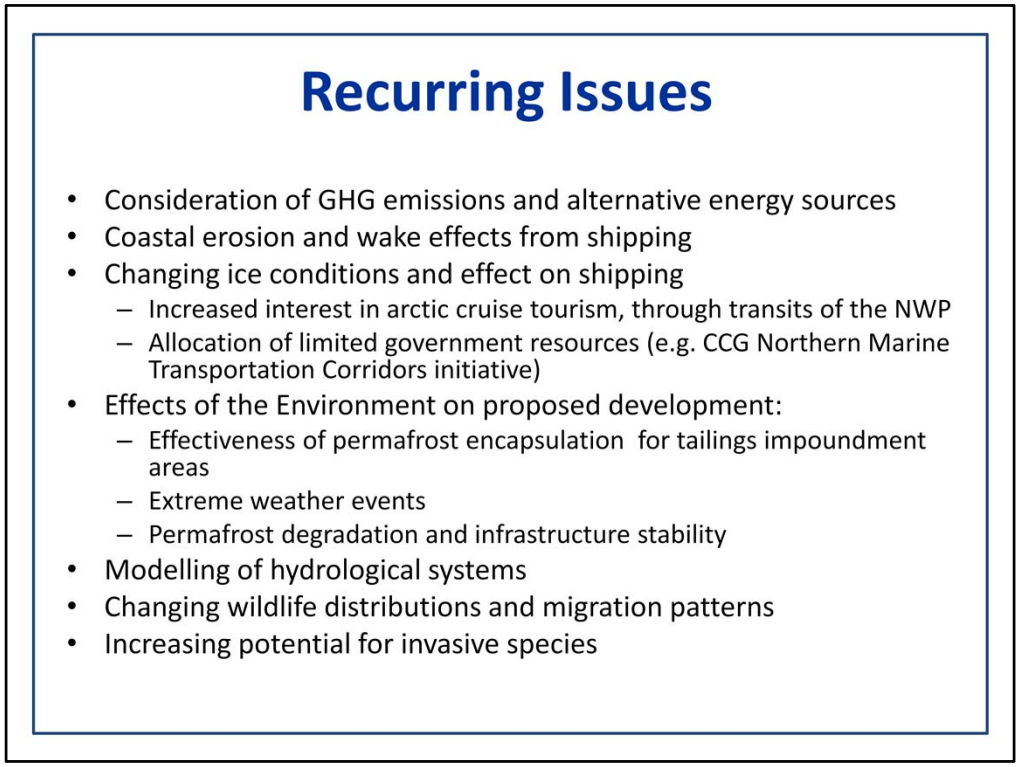
For projects requiring a full environmental review, the Board's processes are comparable to other Canadian jurisdictions, however there is an especially strong focus on promoting and enabling public engagement throughout. This is reflective of the objectives of the Nunavut Agreement, which ensured rights for Inuit to participate in decision-making concerning the use, management and conservation of land, water and resources in the Nunavut Settlement Area.

Full environmental reviews typically take from 1 to 3 years to complete, depending upon the complexity of the project, the number of affected communities, and the time taken by the proponent to address information requirements, among other factors.



Mining and mineral exploration is the biggest driver to Nunavut's economy. We currently have three mines in active operation, another under construction, and one more that's been closed and is beginning to undergo reclamation.

The NIRB has monitoring programs in place for each of these projects, focusing on compliance monitoring against project approvals and effects monitoring against impact predictions. The results from these programs further inform our monitoring efforts as well as our ongoing assessments for other projects.



For some time now there has been an increasing recognition of the importance of climate change considerations within the field of environmental impact assessment, and the project-specific assessments conducted by the NIRB have necessarily reflected this. Given that we operate in the Arctic however, and recognizing our role in both assessment and effects monitoring, the issues that must be addressed are much more immediate and central to the NIRB's decision-making than might be the case elsewhere in Canada.

Some examples of issues that have arisen in project-specific EAs include:

Recurring Issues

- Changing approach to how projects are being planned

- Within several recent final EA reports, the NIRB cited the uncertainty of potential impacts associated with climate change in the future as presenting unique challenges to the assessment
  - Led to increased monitoring and reporting requirements
  - Contributed to determinations that projects should not proceed

We've also begun to see changes to how project proponents are actually designing their projects, with additional options and contingencies being incorporated to address uncertainty around the climatic conditions that they might be subject to in the future. For example, a project proposed to transport supplies from a marine landing area to the inland mine site seasonally using a winter ice road. A secondary plan for constructing an all season road was also included in the assessment by the Proponent, as a contingency against possible future climate change. Both options had to be given due consideration, significantly expanding the scope of the assessment.

Within several recent final EA reports, the NIRB cited the uncertainty of potential impacts associated with climate change in the future as presenting unique challenges to the assessment. This has led to increased monitoring and reporting requirements associated with project approvals, and has also

contributed to determinations that projects should not proceed owing to significant uncertainty.

Local Knowledge

- The term Inuit Qaujimajatuqangit encompasses Inuit "Traditional Knowledge" (TK)
  - Encompasses local and community based knowledge, ecological knowledge (both traditional and contemporary), which is rooted in the daily life of Inuit, and has an important contribution to make to an environmental assessment
- Inuit Qaujimajatuqangit assists greatly in making impact predictions, particularly where scientific baseline may be lacking



Local community knowledge or Inuit Qaujimajatuqangit is a critical component of our processes. It plays a significant role in the preparation and evaluation of Environmental Impact Statements in terms of establishing baseline information, identifying key issues, predicting effects and assessing their significance.

Proper recognition of Inuit Qaujimajatuqangit allows for creation of an Inuit lens through which impact analyses can be better understood and can contribute to more active and meaningful community engagement.

While much has been made of instances where traditional knowledge and science-based knowledge do not align, in the Nunavut-context Inuit Qaujimajatuqangit contributes greatly to assessments, more often than not helping to reinforce areas where the available science is lacking.

Local Knowledge

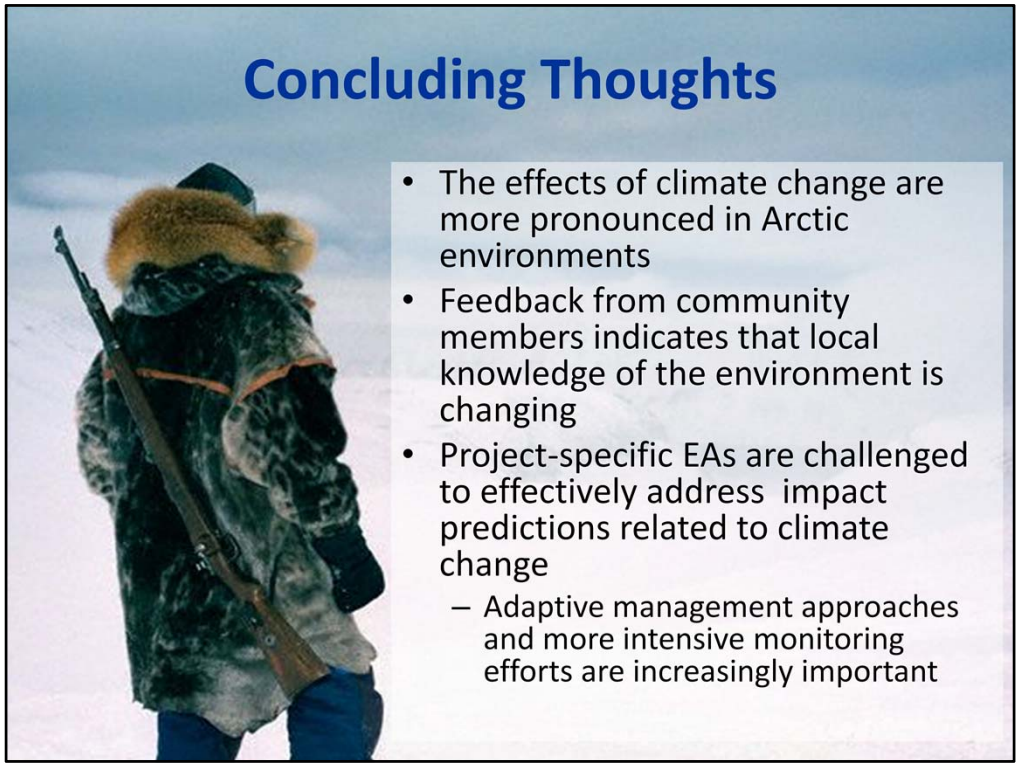
- There is broad recognition in local communities that the climate is changing, weather and seasonal timings are changing, wildlife populations and distributions are changing.

"We have a vast environment even though we are a small community, and the climate change, it's getting warmer, and I think everything is feeling the climate change, even in our immediate environment species like the wildlife that we eat are feeling it, and at the same time, we can't run our environment. We are just part of the ecosystem and we have to adapt to the change, and we're going to have to do that if we want to still have country food to eat."

– M. Kigutak, Grise Fiord, NIRB Final Hearing, File No.: 08MN053 Transcript, July 19, 2012, p. 1091, lines 25-26, p.1091, lines 1-8

Recently we've also begun to see more pronounced recognition in Nunavut communities that the local climate is changing. Specifically, community members frequently comment on the increased variability in weather and seasonal changes, as well as shifting wildlife distributions, and decreasing populations. At the community level there is sometimes a pronounced discomfort with accepting impact predictions in light of the rapid pace of climate change being experienced.

This statement was provided during a NIRB public hearing by a resident of Grise Fiord, Canada's northernmost community. (Aujuittuq, "place that never thaws")



To quickly wrap up with a few concluding points:

- Effects of climate change are more pronounced in Arctic environments.
- Feedback from community members indicates that local knowledge of the environment is changing, affecting the confidence in the knowledge that can be comfortable shared and the impact predictions that are being presented.
- Project-specific EAs are and will continue to be challenged to effectively address impact predictions related to climate change.
    - Consideration for adaptive management approaches and more rigorous monitoring programs is becoming increasingly important in the context of Nunavut and the Canadian Arctic.

Quajannamiik!

Thank you!

Merci!

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