The Yukon and the Arctic

Research Report
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Introduction

This research was conducted in May 2016 by Pénélope Langlais-Oligny during her internship with the Yukon Conservation Society. The goal of the research was to identify the important issues in the Yukon North Slope and the Beaufort Sea from an environmental point of view to help YCS develop an official opinion on Arctic Ocean issues.

The research was presented in June 2016 to YCS’ team with the support of a power point. The power point can be found in the Outreach computer, under the folder named “Penelope”.
Geographical Overview

The Arctic Ocean

Annex A: Map of the Arctic Region
- The Arctic Ocean has a surface of 14,56 million km\(^2\) (3% of the Earth’s total surface area).
- It has a coastline with Russia, Norway, Denmark (Greenland), Canada and United States.

The Beaufort Sea

Annex B: Map of the Beaufort Sea
Annex B2: Map of the Mackenzie River
- The Beaufort Sea is a marginal sea of the Arctic Ocean.
- It has a coastline with Canada (Yukon and NWT) and USA (Alaska).
- Its surface is of 476,000 km\(^2\)
- “The Mackenzie River is the terminating artery for the water that flows from a fifth of the country. Its outflow is the most significant physical input to the Beaufort Sea, a major but poorly understood influence on the wider Arctic Ocean.” See annex B2.

The Yukon North Slope

Annex C: Map of the Yukon North Slope
- All Yukon North Slope is part of the Inuvialuit Settlement Region (ISR). In the Inuvialuit Final Agreement (IFA), the Yukon North Slope is referred as “all those lands between the jurisdictional boundaries of Alaska and the Yukon Territory and the Northwest Territories, north of the height of land dividing the watersheds of the Porcupine River and the Beaufort Sea and including adjacent nearshore and offshore waters and islands.”

- Parks of the Yukon North Slope are: Ivavik National Park and Hershel Island Territorial Park. They were established within the IFA. See Annex C. Along with Vuntut National Park, Ivavik and Hershel are part of Canada’s tentative list for UNESCO World Heritage.

- There are no communities in the Yukon North Slope.

**The Inuvialuit Settlement Region**

Annex D: Map of the Inuvialuit Settlement Region Relative to Canada

Annex E: Map of the Inuvialuit Settlement Region in the Yukon Territory

Annex F: Map of the Inuvialuit Settlement Region

- With a total of 906 430 km², the ISR includes Yukon North Slope (Yukon), Mackenzie Delta (NWT), Arctic Islands (NWT) and Beaufort Sea (Canada and NWT/Yukon)

- There were 5756 inhabitants in the ISR in 2006, of which 3,115 were Inuvialuit. All ISR inhabitants live in the NWT.
The Inuvialuit Settlement Region

Land Separation in the Inuvialuit Settlement Region

Annex G: Map of the Private Lands (Class A and B lands) in the Inuvialuit Settlement Region
Annex H: Map of the Private Lands Separated in Communities

- The ISR is determined by the Inuvialuit Final Agreement (IFA) and the Western Arctic Claims Settlement Act. The IFA was signed in 1984, and was the first land claim agreement in the Canadian North.

- The IFA was signed by the Inuvialuit, Canada, NWT and Yukon: “The GNWT and Yukon Government, although not parties to the Inuvialuit Final Agreement (IFA), did sign the IFA as part of the Federal negotiating team. Both the GNWT and Yukon Government agreed to and have specific obligations within the IFA.”

- The Inuvialuit Settlement Region (ISR) includes both Crown Lands and Inuvialuit Private Lands (i.e. class A and B lands). The ISR’s surface is of 906,430 km$^2$, and the Private Lands’ surface is of about 90,600 km$^2$.

- The Inuvialuit class A lands (surface and subsurface rights) in the ISR recover about 130,000 km$^2$, and class B lands (surface rights) recover about 77,700 km$^2$. See Annex G.

- There are seven Private Lands in the ISR. Private Lands are located around the six Inuvialuit communities (Aklavik, Holman, Inuvik, Paulatuk, Sachs Harbour and Tuktoyaktuk) and Cape Bathurst. See Annex H.

- There are no class A or class B Inuvialuit lands in the Yukon.

Benefits of the Inuvialuit Final Agreement for the Inuvialuit

- “In the IFA, the Inuvialuit agreed to give up their exclusive use of their ancestral lands in exchange for certain other guaranteed rights from the Government of Canada.”
  http://www.irc.inuvialuit.com/about/finalagreement.html
- Receiving ownership and financial compensation over about 90 600 km² of land (this number represents the surface of the Private Lands).


- Receiving wilderness harvesting rights in the ISR.

- Receiving the right to participate in the governance of the ISR through the Inuvialuit corporations and co-management boards.

**Governance over the Inuvialuit Settlement Region**

Annex I: Diagram of the co-management system

- The Inuvialuit are currently negotiating a self-government agreement with the federal and NWT governments. The negotiations started in 2006.

Details about the organizations on the diagram (see Annex I):

- **The Inuvialuit Game Council:** “represents the collective Inuvialuit interest in all matters pertaining to the management of wildlife and wildlife habitat in the ISR.”
  http://jointsecretariat.ca/co-management-system/inuvialuit-game-council/

- **The Environmental Impact Screening Committee (EISC)** “determines whether proposed developments require detailed environmental impact assessments.”

- **The Environmental Impact Review Board (EIRB)** “carries out public reviews of development proposals deemed necessary by the EISC.”

- **The Fisheries Joint Management Committee (FJMC)** “advises the Minister of Fisheries and Oceans on matters relating to fisheries and marine mammals in the ISR.”

- **The Wildlife Management Advisory Council (NWT)** “advises governments and other appropriate bodies on wildlife management and conservation matters in the NWT portion of the Inuvialuit Settlement Region.”
The Wildlife Management Advisory Council (North Slope) “advises governments and other appropriate bodies on wildlife management and conservation matters on the Yukon North Slope, including Herschel Island.”

The Joint Secretariat: “was established in 1986 to provide technical and administrative support to the Inuvialuit Game Council and 4 of the 5 co-management boards. […] The […] Wildlife Management Advisory Council (North Slope) […] is not administratively supported by the Joint Secretariat like the other boards.”

Inuvialuit corporations were created to receive and manage the IFA benefits. They include the: Inuvialuit Regional Corporation, Inuvialuit Investment Corporation, Inuvialuit Development Corporation, Inuvialuit Petroleum Corporation, and Inuvialuit Land Corporation.

The Inuvialuit Regional Corporation has the mandate to develop the economy of the Inuvialuit as well as preserving their values and environment.
Maritime Boundaries

Territorial Sea Regulations

Annex J: Map of the Maritime Boundaries in the Arctic Ocean

- The United Nations Convention on the Law of the Sea (UNCLOS) determines sea regulations. It was adopted in 1982 and recognized as an international law in 1994. Canada signed and ratified the Convention in 2003; USA signed it but did not ratify it yet.

- 5 different levels of national sovereignty over sea waters:

1. **Territorial sea** – 3 to 12 nautical miles from shore (6 to 20 km)
   Completely sovereign territory of the Coastal State

2. **Contiguous zone** – maximum of 24 nautical miles from shore (44 km)
   Subject to the implantation of customs and laws from the Coastal State

3. **Exclusive Economic Zone (EEZ)** - 200 nautical miles from shore (370 km)
   The Coastal State can exploit all natural resources over and under the soil of the EEZ
   The Coastal State is in charge of environmental regulations, conservation of fish stock and marine research
   Other States have the right to install submarine cables and pipeline in the EEZs
   Other States can claim unused fisheries resources in the EEZs.

4. **Extended Continental Shelf** – as far as the continental shelf extends

   Same powers as EEZ on non-living resources, but no rights on water columns

   The Coastal State that claims the extended EEZ has to prove scientifically that its continental shelf continues beyond 200 miles

   “Coastal States share with the international community part of the revenue derived from exploiting resources from any part of their shelf beyond 200 miles”
5. **Beyond EEZ or Extended Continental Shelf**: known as High Sea or International Waters
   Administered by the International Seabed Authority

   - Territorial Seas and EEZs are under federal governance.

   - Canada, USA, Norway, Denmark (Greenland) and Russia claimed their EEZs in the Arctic Ocean (see Annex J)

   - Canada is in the process of claiming its Extended Continental Shelf. A partial submission that did not include the Arctic Ocean was made to the Commission on the Limits of the Continental Shelf in 2013. Canada is still conducting scientific research to fill up a submission that includes the Arctic Ocean.

   - USA is conducting research to determine the limits of its Extended Continental Shelf since 2001, but would have to ratify the Convention to make a submission to the Commission on the Limits of Continental Shelf.

**Border dispute between USA and Canada**

Annex K: Map of the disputed area

   - Canada says the maritime boundary between Alaska and Yukon should follow the onshore boundary.

   - USA says the boundary should be defined by the equidistance between the coasts of Alaska and Yukon.

   - The disputed area is of about 21,000 km².

   - If USA ratifies the UNCLOS, the dispute would probably go to the International Court of Justice or the International Tribunal for the Law of the Sea

**Natural resources in the disputed area**

   - According to Canada’s National Energy Board, the disputed area contains a potential 1.7 billion cubic metres of gas and over 1 billion cubic metres of oil.

   - 2004: “The United States government has already leased eight plots of submarine terrain in this contested territory, for exploration and exploitation of potential oil reserves.” file:///C:/Users/YCSMembership/Downloads/SeaChanges%20(2).pdf
- 2016: The U.S. Bureau of Ocean Energy Management five-years program plan for offshore drilling includes opening an oil and gas lease in the disputed area.

Yukon’s and the Northwest Territories’ maritime boundary

- 2012: “The Yukon and N.W.T. don’t have a defined offshore boundary yet, but a glance at the map suggests equidistance would make an eventual Yukon zone smaller and the N.W.T. zone bigger.”

- In 2006, Yukon Party included in their platform as a goal: “Work with Canada and the Northwest Territories to resolve the outstanding offshore jurisdictional boundary issues between the NWT and Yukon including the right of the Government of Yukon to share the government revenues derived from oil and gas development in what should be recognized as the Yukon’s portion of the Beaufort Sea.”

* It is not easy to find information about this boundary issue.
**Beaufort Sea Meltdown**

**Context and Specifics of the Beaufort Sea Meltdown**

Annex L: Picture of the different ice type bands in the Beaufort Sea in 2014

- The meltdown of the Arctic had a big mediatic coverage in 2007 and 2008 due to its strong acceleration.

- “Since 1978, sea ice cover has declined by approximately nine per cent per decade, and the rate of melting appears to be increasing each year.”
  http://davidsuzuki.org/issues/wildlife-habitat/science/critical-species/polar-bear-fact-sheet/?gclid=CjwKEAjwxG5BRCC7ezLzNmR8HUJSJAAre36jDxO6qgGcZljT8C1IMnkJdgKNH-YKT1IDkoqljlTbxoCuGXw_wcB

- There are different types of ice in the Arctic Ocean: multi-year ice (thick), first year ice (thin) and fast ice (coastal ice, thin). See Annex L.

- 2016: “[The] ice cover stretching across the Arctic Ocean is, on average, 15 percent thinner than it was last year at the same time. Thinner ice is more easily broken by wind and waves and melts more quickly, intensifying concerns about a potential new record low this year. […] much of the remaining thick, multiyear sea ice is positioned where it will be pushed southward and melt.”

- The fact that there is not a lot of multi-year ice left leads to a longer annual melt down period. The thin ice remaining tends to fracture, creating large areas of open water called polynya. “Arctic ice reflects close to the 95 per cent of solar radiation that hits it. Once the ice melts away, seawater absorbs the heat instead, later releasing it back to the atmosphere, a process that will speed global warming. The phenomenon is already at play in the Beaufort [in 2008].”
  http://www.canada.com/story.html?id=06a00a8d-9aa6-4103-98a8-e9d65dc0aa2
Consequences of the meltdown

- Consequences on northern hemisphere’s weather, on animals, on erosion, on global sea level, and on the salinity level of the water:

“The region acts like a giant refrigerator that has a strong effect on the northern hemisphere's meteorology. Without its cooling influence, weather patterns will be badly disrupted [...]. Similarly, coastlines will no longer be insulated by ice from wave damage and will suffer erosion, as is already happening in Alaska. [...] Without sea ice to bolster them, land ice - including glaciers - could topple into the ocean and raise global sea levels, threatening many low-lying areas, including Bangladesh and scores of Pacific islands.”

http://www.theguardian.com/environment/2008/aug/10/climatechange.arctic

“[Arctic meltdown would lead to] more extreme droughts and rainfall events in the northern hemisphere. The declining sea ice is also diminishing populations of polar bears—which depend on the ice as a base to hunt and breed—as well as walruses, ice-dependent seals and sea birds that hunt along cracks in the ice.”

“The high-latitude freezing and melting cycle can variously result in saline convection, freshwater capping, or freshwater injection into the interior ocean.”

**Increased commercial interests linked with the meltdown**

- “Melting sea ice is making the Arctic more accessible to shipping and resource exploration” as well as commercial fishing.

- “Expected increases in shipping [in the Beaufort Sea] have prompted the U.S. Coast Guard to establish two new outposts on Alaska's north coast to strengthen its monitoring and search-and-rescue capabilities.”
  http://www.canada.com/story.html?id=53edf4f2-fc7e-4d1c-a39b-72530d19d997

- May 2015: “New guidelines have been passed to prevent pollution from ships in polar waters. The Polar Code, passed at a meeting in London of the International Maritime Organization, ban ships from releasing oil, sewage, chemicals and waste into the sea. The measures are set to come into force in 2017. But environmentalists say the regulations do not go far enough.”
# Wildlife in the Yukon North Slope and the Beaufort Sea

## Animals in the Yukon North Slope and Beaufort Sea

### Animals only or mostly present in the Yukon North Slope and/or the Beaufort Sea

<table>
<thead>
<tr>
<th>Animal</th>
<th>Yukon Conservation status</th>
<th>Global Conversation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polar Bear</td>
<td>S1 (Critically Imperilled)</td>
<td>G3 (Vulnerable)</td>
</tr>
<tr>
<td>Barren Ground Caribou (includes the Porcupine Caribou Herd)</td>
<td>Not yet assessed</td>
<td>Not yet assessed</td>
</tr>
<tr>
<td>Bowhead Whale</td>
<td>S3 (Vulnerable)</td>
<td>G3 (Vulnerable)</td>
</tr>
<tr>
<td>Arctic Fox</td>
<td>S2 (Imperilled)</td>
<td>G5 (Secure)</td>
</tr>
<tr>
<td>Beluga</td>
<td>S4 (Apparently Secure)</td>
<td>G4 (Apparently Secure)</td>
</tr>
<tr>
<td>Muskox</td>
<td>S1 (Critically Imperilled) / S2 (Imperilled)</td>
<td>G5 (Secure)</td>
</tr>
<tr>
<td>Wolverine</td>
<td>S3 (Vulnerable)</td>
<td>G4 (Apparently Secure)</td>
</tr>
<tr>
<td>Seal (Hooded, Bearded, Spotted and Ringed)</td>
<td>SNA, S4, SU and S3</td>
<td>G4G5, G4G5, G4G5, G5</td>
</tr>
</tbody>
</table>

### Animals present in all or the majority of the Yukon, including the Yukon North Slope (all S4 or S5 and G5)

- Moose
- Canada Lynx
- Red Fox
- Grey Wolf
- Ermine
- Arctic Ground Squirrel
- Shrew
- Vole
- Least Weasel
Polar bears

Annex M: Map of the polar bear population

- As a consequence of the meltdown, polar bears have to go on dangerous swims to find stable ice, and they spend more time onshore than usual, which “is leading to weight loss, physical deterioration and decreased rates of reproduction.”
  
  http://davidsuzuki.org/issues/wildlife-habitat/science/critical-species/polar-bear-fact-sheet/?gclid=CjwKEAjwxoG5BRCC7ezlzNmR8HUSJAAre36jDDxO6qqGcZJjT8C1IMnKJdgKNH-YKT1IDkoqJlTb xoCuGXw_wcB

- Polar bears were declared a Global Endangered Species in 2008 and a Yukon Special Concern in 2008.

- “Two-thirds of the world's polar bear population could be gone by midcentury if predictions of melting sea ice hold true, the U.S. Geological Survey reported [on September 2007].”
  
  http://www.reuters.com/article/us-climate-polarbears-idUSN0721298620070907

- “[A study conducted by the Wildlife Management Advisory Council] found traditional knowledge holders in the [southern Beaufort] say the bears are healthy and their population is stable.”
  

Harvest rights of the Inuvialuit

Annex N: Hunting the Porcupine Caribou: an example of preferential harvesting rights for the Inuvialuit

- “12. (24) […] the Inuvialuit right to harvest on the Yukon North Slope includes

(a) the preferential right to harvest all species of wildlife, except migratory non-game birds and migratory insectivorous birds, for subsistence usage throughout the Yukon North Slope;

(b) the exclusive right to harvest [muskox (IFA, 14(6)(c))] furbearers and polar bears;

and (c) the exclusive right to harvest game within the National Park, the Territorial Park
Inuvialuit also have the exclusive right to harvest on Inuvialuit lands (IFA, 14(6)(d)).

- “Other aboriginal peoples continue to have traditional harvesting rights. Bilateral agreements concerning these rights and other matters are in place with the Dene/Metis of the NWT and the Council for Yukon First Nations.”
http://www.irc.inuvialuit.com/about/ifasummary.html

- Inuvialuit also have the right to receive financial compensation for wildlife. (IFA, 13(1)).

**Important stakeholders in wildlife management**

**Annex I: Diagram of the Co-management System**

- “Each Inuvialuit Community Corporation establishes a community **Hunters and Trappers Committee**. The Committee’s duties include:
  - advising the Inuvialuit Game Council on local wildlife matters;
  - making bylaws (enforceable under the NWT Wildlife Ordinance and subject to laws of general application), governing the exercise of certain Inuvialuit preferential harvest rights under the IFA; and
  - sub-allocating quotas. Although there are no Inuvialuit communities in the Yukon portion of the Settlement Region, committee powers are not expressly limited to the Northwest Territories portion of the Region”

- “The Inuvialuit Game Council represents the final Inuvialuit authority in wildlife under the IFA. Council’s duties include:
  - appointing Inuvialuit members to all joint government/ Inuvialuit bodies, as well as other bodies having an interest in wildlife, including those under the IFA;
  - advising government on wildlife issues either on its own or through the Wildlife Management Advisory Councils (NWT and North Slope);
  - assigning community hunting and trapping areas within the Inuvialuit Settlement Region where appropriate; and
  - allocating Inuvialuit quotas among communities, where appropriate.”
- “The Wildlife Management Advisory Council (North Slope) was established after the signing of the IFA. The Council:
  - advises appropriate Ministers on wildlife policy and management;
  - advises on issues relating to the Yukon North Slope to Porcupine Caribou Management Board, the Yukon Land Use Planning Commission, the Review Board and other appropriate groups;
  - prepares and recommends wildlife conservation and management plans for the Yukon North Slope to appropriate authorities;
  - determines and recommends appropriate Inuvialuit game harvesting quotas in the Yukon North Slope;
  - advises on habitat protection measures taken under certain parts of the IFA; and
  - advises the appropriate Minister on national park planning and management in the Yukon North Slope, and recommends a management plan for the national park.”
  

The Council is composed of five members appointed by the Inuvialuit, Yukon and Canada.

*There is also a Wildlife Management Advisory Council in the NWT.

- “The Porcupine Caribou Management Board is an advisory board established under the Porcupine Caribou Management Agreement (1985) to communicate information about the herd and provide recommendations to agencies responsible for managing the herd.”

  http://www.pcmb.ca/about
Fisheries in the Yukon North Slope and Beaufort Sea

Fisheries management in the Inuvialuit Settlement Region

- “In all cases, the Crown owns the water and has the right to control both water and water beds in order to manage fish and migratory birds.” http://www.irc.inuvialuit.com/about/ifasummary.html

- On class A and B lands, the Inuvialuit possesses the bed of waters, but the federal government possesses the waters in themselves. That applies to the Beaufort Sea.

- Within the ISR (including its offshore), Inuvialuit have first priority to harvest marine mammals (IFA, 14(29)), and preferential right to harvest fish (IFA, 14(31)).


- “Canada’s Minister of the Department of Fisheries and Oceans established the Fisheries Joint Management Committee (FJMC) in 1986, as required by the Inuvialuit Final Agreement. The FJMC has the following responsibilities:
  (1) to assist Canada and the Inuvialuit in administering the rights and obligations related to fisheries under the IFA,
  (2) to assist the Minister in carrying out his responsibilities for the management of fisheries and marine mammals in the Inuvialuit Settlement Region (ISR),
  and (3) to advise the Minister on all matters relating to Inuvialuit and ISR fisheries.” http://www.fjmc.ca/

- The Committee is composed of five members, appointed by the Inuvialuit and Canada.

Fisheries in the High Seas of the Arctic Ocean

- “The high seas part of the Arctic Ocean beyond the 200-mile limits claimed by the U.S. and Canada has no real protection other than the ice that covers it.” http://www.cbc.ca/news/politics/us-canada-arctic-protection-1.3486062

- In July 2015, Canada, USA, Russia, Norway and Denmark signed a declaration that refrains commercial fishing in a “1.1 million-square-mile zone in the central Arctic
Ocean […] until there is better scientific knowledge about the marine resources there and until there is a regulatory system in place to protect those resources. But the five nations [will] need participation from China, Korea and Japan […]”
https://www.adn.com/article/20150716/5-nations-sign-declaration-protect-arctic-donut-hole-unregulated-fishing

- March 2016: Trudeau and Obama “call for a binding international agreement to prevent the opening of unregulated fisheries in the central Arctic Ocean to preserve living marine resources and promote scientific research in the region. [They also] pledged to create a pan-Arctic marine protection area network, including at least 10 per cent of their Arctic waters and 17 per cent of their Arctic land mass, committing to "substantially surpass these national goals in the coming years."
Oil and Gas in the Beaufort Sea

Oil and Gas Potential in the Beaufort Sea

- “Recent studies have suggested that the Arctic contains over a quarter of the world’s untapped natural gas reserves, and about 13 percent of its undiscovered oil reserves.”
  http://www.conocophillips.ca/our-operations/canadian-arctic/Pages/default.aspx

- “The Beaufort Sea […] is estimated to contain 40 trillion cubic feet of natural gas and 4,500 million barrels of oil.”

Potential Developers in the Beaufort Sea


- 2015: “The Beaufort Sea was first explored for hydrocarbons in the 1950s […]. Offshore drilling began in 1972; 70 wells were drilled by 1980s; and 93 to date. Only one offshore well has been drilled in the last 23 years.”

- “There were no bids for parcels in the Beaufort Sea in 2015. […] There are 16 Exploration Licences, 48 Significant Discovery Licences and no Production Licences in the Beaufort Sea [in 2015].”

- Several companies did exploration work in the Beaufort Sea in the past few years, including Imperial Oil Resources Ventures Limited (constituted of BP Exploration Operating Company Limited (50%), ExxonMobil (25%) and Imperial (25%)), Conoco Phillips, Chevron Canada and Devon Canada. Chevron Canada put on hold indefinitely their drilling plans on December 2014, and Imperial Oil Resources Ventures Limited did the same in June 2015.

Process for developers to explore and extract in the Yukon North Slope and Yukon’s portion of the Beaufort Sea

Annex P: Relevant clauses about commercial development in the Inuvialuit Settlement Region directly taken from the Inuvialuit Final Agreement
Yukon North Slope Specific Situation:

- “[The Yukon North Slope] received special protection in order to maintain the wildlife, habitat and native harvesting. In the area west of Babbage River, Ivvavik National Park was established. Herschel Island, managed by the Yukon Government as a Territorial Park, falls under a similar protective regime.”
  http://www.irc.inuvialuit.com/about/ifasummary.html

- The two active Yukon Oil and Gas Dispositions remaining from the 70’s in the Ivvavik National Park (Y-EL 329) are currently under work prohibition order. See annex O.

- In 2010 Yukon Government made an Order in Council (OIC) withdrawing the area east of the Babbage River [i.e. the area that is not a national or territorial park in the Yukon North Slope] from mining and oil and gas extraction (Yukon North Slope Withdrawal M.O. 2010/09). That means that no development is possible onshore on the Yukon North Slope. However, the OIC is just a ministerial order, and could be overturned. See annex Q.
Rights of exploration

**Onshore development**
Developers have to request a posting to the Yukon Government, and then go through the disposition process. YUKON government

**Offshore development**
Developers have to bid and get rights of exploration from the Indigenous and Northern Affairs Minister. Government of CANADA

Environmental Assessments

**Onshore and offshore development**
Developers have to apply to the Environmental Impact Screening Committee, that determines whether the developer has to apply to the Environmental Impact Review Board OR the developers have to apply to the Yukon Environmental or Socio-economic Assessment Board.

INUVAULUIT organizations + CANADA, YUKON and NWT governments (joint management board) OR YUKON organization

Final Authorization

**Onshore development**
Developers have to go through Yukon’s oil and gas branch application process, who will take into consideration EIRB’s or YESAB’s recommendations. YUKON Government

**Offshore development**
Developers have to through the National Energy Board application process, who will take into consideration EIRB’s or YESAB’s recommendations. Government of CANADA
*Please take note that this summary of the process may contain some imprecisions or uncertainties due to its theoretical status.

* The Beaufort Sea Exploration Joint Venture Drilling Program proposed by Imperial Oil Resources Ventures Limited is a good example to understand the governmental process around an offshore drilling project in the NWT portion of the Beaufort Sea. See annexes P and O.

Clarifications and precisions about the process

- In the ISR, the Canadian Environmental Assessment Agency (Canada) is substituted by the Environmental Impact Review Board (Inuvialuit and Canada) since 2000.

- “The Department of Indigenous Affairs and Northern Development governs the allocation of oil and gas rights to the private sector and all related conditions under CPRA [Canadian Petroleum Resources Act]. The National Energy Board regulates the industrial activities regarding resource conservation, protecting the environment and workers’ safety primarily under COGOA [Canada Oil and Gas Operations Act].”
  
  [http://www.emr.gov.yk.ca/oilandgas/roles_responsibilities.html]

- Developers have to respond to the National Energy Board’s Same Season Relief Well (SSRW) policy: “the applicant must demonstrate the capability to kill an out-of-control well during the same drilling season.”
  
  [http://www.neb-one.gc.ca/pplctnflng/mjrpp/archive/mprlssrw/index-eng.html]

- If the development takes place on Class A or Class B lands, the developer has to apply to the Inuvialuit Land Administration to get a permit.

- YESAB covers all North Slope as described in the IFA: “12.(1) For the purposes of this section, “Yukon North Slope” means all those lands between the jurisdictional boundaries of Alaska and the Yukon Territory and the Northwest Territories, north of the height of land dividing the watersheds of the Porcupine River and the Beaufort Sea, and including adjacent nearshore and offshore waters and islands.”
  
  [http://www.inuvialuitland.com/resources/Inuvialuit_Final_Agreement.pdf]

- March 2016: [Trudeau and Obama] promised to be strict about licensing any kind of Arctic development, and to "set a world-class standard by basing development decisions and operations on scientific evidence." 
  
Offshore Governance: jurisdiction of Yukon and Canada

- The *Canada Yukon Oil and Gas Accord* signed in 1993 had the purpose to introduce a shared management and revenue system for the offshore Yukon’s waters between Canada and Yukon. The *Canada Yukon Oil and Gas Accord Implementation Act* was signed in 1998, and the *Canada Yukon Oil and Gas Accord Memorandum of Understanding* was signed in 2008, but the negotiations did not start yet.

- “To ensure Yukon’s interests are met and regulatory certainty is provided to the oil and gas industry, concluding shared offshore arrangements is a priority for Yukon. Until such arrangements are finalized, an interim joint Federal/ Territorial Offshore Committee has been established.”
  

- “Yukon continues to participate in and monitor a number of national and international initiatives and issues related to the Beaufort Sea region. Some of these include: the Integrated Oceans Management Plan for the Beaufort Sea (under Canada’s Oceans Action Plan); the Beaufort Sea Strategic Regional Plan of Action; the Arctic Council’s Arctic Marine Strategic Plan; and the Canada/U.S. boundary dispute.”
  

- The *Canada Yukon Oil and Gas Accord* implies that a "Beaufort Sea Resource Revenue Sharing Agreement" exists:

  “"Beaufort Sea Resource Revenue Sharing Agreement" means an agreement between Yukon and the Government of the Northwest Territories for the sharing between the two territories of all Resource Revenues from the Beaufort Sea.”


Oil and Gas extraction in Alaska North Slope

Annex U: : Map of the Alaska Highway Pipeline Project

- “The Trans-Alaska Pipeline carries crude oil south from Prudhoe Bay [in the Beaufort Sea] to Valdez, an ice-free port almost 800 miles (1,300 km) away on Alaska’s southern coast.” That Pipeline does not touches the Yukon Territory.
  
  [http://www.britannica.com/place/Beaufort-Sea](http://www.britannica.com/place/Beaufort-Sea)

- There are some plans to build a pipeline that would transport the natural gas that is in Prudhoe Bay. The option that is the most likely to happen is a trans-Alaska pipeline from Prudhoe Bay to Valdez, but the option of building a pipeline that would go through Yukon is still on the table.
Other stakeholders in the Inuvialuit Settlement Region and Beaufort Sea

- The Beaufort Regional Environmental Assessment (BREA) “is a multi-stakeholder initiative to sponsor regional environmental and socio-economic research that will make historical information available and gather new information vital to the future management of oil and gas in the Beaufort Sea.”
  http://www.beaufortrea.ca/about/

- The Beaufort Sea Partnership “is a forum that allows all interested parties the opportunity to discuss mutual interests, goals, and responsibilities. This will also give them a chance to share information using the Oceans Action Plan (OAP) and the Inuvialuit Final Agreement as a frame work for a collaborative and transparent process.”
  http://www.beaufortseapartnership.ca/

- The Beaufort Sea Integrated Management Planning Initiative Working Group (BSIMPI): “As determined by the mandate of the Oceans Act (1997), the four overarching objectives of the Initiative are to: •Integrate the management of all measures and activities in or affecting the Beaufort Sea planning area; •Manage for conservation, sustainability and responsible use of ocean space and marine resources; •Restore and maintain natural biological diversity and productivity; and •Provide opportunities for economic diversification and sustainable wealth generation to foster social well-being for coastal communities and stakeholders.”
  Part of Canada’s Ocean Strategy.
  http://www.beaufortseapartnership.ca/integrated-ocean-management/

- The Beaufort Sea Strategic Regional Plan of Action (BSStRPA) “involves Inuvialuit Settlement Region organizations, federal and territorial governments and industry. The BSStRPA will take a community-based approach to the identification of regional needs with respect to planning for future offshore oil and gas development (including the coastal transition zone), and the actions needed to address them. The outcome of this process will be a Strategic Regional Plan of Action for the Beaufort Sea and coastal transition zone in preparing for the subsequent induced development from the proposed Mackenzie Gas Project.”
  http://www.bsstrpa.ca/aboutus.htm

- The Arctic Council “is the leading intergovernmental forum promoting cooperation, coordination and interaction among the Arctic states, Arctic Indigenous communities and
other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable
development and environmental protection in the Arctic. The Ottawa Declaration lists the
following countries as Members of the Arctic Council: Canada, the Kingdom of
Denmark, Finland, Iceland, the Russian Federation, Sweden and the United States.”
http://www.arctic-council.org/

- “The Institute of the North is a […] non-profit. Areas of special study include Alaska, the
many regions of the Arctic and other areas of the world that are wealthy in both human
cultures and natural resources. The Institute has gained a wide reputation as a center for
the study of commonly-owned lands, seas and resources using Alaska as a model.”
http://www.institutenorth.org/about/
Annexes

Annex A: The Arctic Region

Annex B: The Beaufort Sea

http://www.worldatlas.com/aatlas/infopage/beaufortsea.htm
Annex B2: The Mackenzie River

Annex C: The Yukon North Slope

http://www.wmacns.ca/pdfs/198_YNSandGameManagementSubzones.pdf
Annex D: The Inuvialuit Settlement Region relative to Canada

https://www.neb-one.gc.ca/glbl/nwt-nnvt-mp-eng.html
Annex E: The Inuvialuit Settlement Region relative to the Yukon Territory

Annex F: The Inuvialuit Settlement Region

https://www.aadnc-aandc.gc.ca/eng/1374866904715/1375187197890
Annex G: Private Lands (Class A and B lands) in the Inuvialuit Settlement Region

*Class A Land is in pink, and Class B Land in yellow

Annex H: Private Lands separated in communities

Figure 1. Private Inuvialuit Lands and Crown Lands within the Inuvialuit Settlement Region.

Annex I: The co-management system

The Co-management System
As established in the Inuvialuit Final Agreement

<table>
<thead>
<tr>
<th>Inuvialuit Organizations</th>
<th>Co-Management Boards</th>
<th>Government Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunters and Trappers Committees (HTCs)</td>
<td>Environmental Impact Screening Committee</td>
<td>Canada (Aboriginal Affairs and Northern Development Canada)</td>
</tr>
<tr>
<td></td>
<td>Environmental Impact Review Board</td>
<td>Yukon Government</td>
</tr>
<tr>
<td></td>
<td>Fisheries Joint Management Committees</td>
<td>Government of the Northwest Territories</td>
</tr>
<tr>
<td></td>
<td>Wildlife Management: Advisory Council (North Slope)</td>
<td>Canada (Environment Canada - Parks Canada)</td>
</tr>
<tr>
<td></td>
<td>Wildlife Management: Advisory Council (Northwest Territories)</td>
<td>Yukon Government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada (Environment Canada - Canadian Wildlife Service)</td>
</tr>
</tbody>
</table>

The Joint Secretariat-Inuvialuit Settlement Region provides administrative, technical, and logistical support to Inuvialuit Organizations and Co-management Boards.

Annex J: Maritime boundaries in the Arctic Ocean

*Plain green = Canada’s Internal Waters
Dashed green = Canada’s Exclusive Economic Zone

https://www.dur.ac.uk/resources/ibru/resources/Arcticmap04-08-15.pdf
Annex K: Disputed area in Beaufort Sea

Annex L: Band of different ice types in Beaufort Sea in 2014


Trends in Polar Bear Subpopulations

Subpopulation size

No. of Bears

- <500
- 500-1,000
- 1,000-2,000
- 2,000-3,000
- Unknown


- Blue: Stable
- Green: Increasing
- Red: Declining
- Orange: Data deficient

Annex N: Hunting the Porcupine Caribou: an example of preferential harvesting rights for Inuvialuit

<table>
<thead>
<tr>
<th>Herd Size</th>
<th>Licensed Hunters</th>
<th>Aboriginal Hunters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Green Zone</strong></td>
<td>Up to two animals harvested</td>
<td>No harvest limit</td>
</tr>
<tr>
<td>More than 115,000</td>
<td>Mandatory bulls only</td>
<td>Cows and bulls may be taken</td>
</tr>
<tr>
<td>animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Yellow Zone</strong></td>
<td>Only one animal harvest</td>
<td>No harvest limit</td>
</tr>
<tr>
<td>80,000 to 115,000</td>
<td>Mandatory bulls only</td>
<td>Voluntary bulls only</td>
</tr>
<tr>
<td>animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Orange Zone</strong></td>
<td>Harvest limit through permits</td>
<td>Harvest limit through subsistence allocation</td>
</tr>
<tr>
<td>45,000 to 80,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Red Zone</strong></td>
<td>No harvesting</td>
<td>No harvest except for ceremonial purposes</td>
</tr>
<tr>
<td>Less than 45,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>animals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://www.pcmb.ca/harvest
Annex O: Development licences in the Beaufort Sea in 2012

https://www.aadnc-aandc.gc.ca/eng/1335971994893/1335972853094
Annex P: Non summarized relevant clauses directly taken from the Inuvialuit Final Agreement

- 7 (18) “Private access of a commercial nature to Inuvialuit lands shall be available as follows:

  (a) access by commercial interests in order to reach non-Inuvialuit lands to exercise rights of a casual nature relating to investigative and preliminary work on those lands; subject to the same conditions as set out in subsection (15) [i.e. (i) there be no significant damage to the lands; (ii) there be no abuse or extension of the right; (iii) there be no mischief committed on the lands, and (iv) there be no significant interference with inuvialuit use of and peaceable enjoyment of the lands.];

  (b) access by commercial interests in order to reach non-inuvialuit lands to exercise rights where the access would be significant but temporary; subject to a right of way agreement being negotiated with the Inuvialuit that would provide for (i) a location least harmful to the Inuvialuit and suitable to the commercial interest, and (ii) matters relating to damage, mitigation, restoration and loss of use;

  (c) access by commercial interests in order to reach non-Inuvialuit lands to exercise rights where the access would require a permanent right of way, subject to Participation Agreements as provided by section 10 [i.e. shall receive the agreement of Inuvialuit Land Administration]; and

  (d) access by commercial interests in order to enter on Inuvialuit lands to exercise interests in or on those lands, subject to Participation Agreements as provided by section 10 [i.e. shall receive the agreement of Inuvialuit Land Administration].

- 7. (19) Access for the purposes of subsection (18) requires that prior notice be given to the Inuvialuit.

- 7. (20) The following conditions apply to the access provisions set out in subsections (14) to (19): (a) the granting of access by the Inuvialuit does not create responsibility on their part for damages suffered by the user; (b) users of access rights are responsible for damages caused to the land; and (c) the user who fails to comply with the access provisions may be removed from the land.

- 10. (1) For the purposes of exploration, development and production activities by holders of valid rights or interests issued by Canada on 7(1)(a) lands and holders of petroleum, coal or mineral rights or interests issued by Canada on 7(1)(b) lands, access on and across Inuvialuit lands shall be guaranteed by the Inuvialuit Land Administration (ILA), subject
to the payment by the developer of fair compensation to the Inuvialuit for such access, for any damage to Inuvialuit lands and for any diminution of the value of their interests in their lands.

- 10. (2) Except as otherwise agreed by the ILA, before exercising his guaranteed right of access, a developer must have concluded a valid Participation Agreement with the ILA setting out the rights and obligations of the parties respecting the activity for which the access is being granted.

- 10 (3) The ILA shall have the right to negotiate with the developer/applicant an appropriate land rent (not to include royalty revenues) and a Participation Agreement that may include specific terms and conditions respecting the nature and magnitude of the land use for which the access is being sought. Without limiting their generality, the terms and conditions may also include: (a) costs associated with any ILA inspection of the development work sites and the nature and scope of such inspection; (b) wildlife compensation, restoration and mitigation; (c) employment, service and supply contracts; (d) education and training; and (e) equity participation or other similar types of participatory benefits.

- 11. (27) The decision containing the recommendations of the Review Board shall be transmitted to the governmental authority competent to authorize the development. That authority, consistent with the provisions of this section and after considering, among other factors, the recommendations of the Review Board, shall decide whether or not, on the basis of environmental impact considerations, the development should proceed and, if so, on what terms and conditions, including mitigative and remedial measures.

- 11. (28) If, pursuant to subsection (27), the competent governmental authority decides that further impact assessment and review is required, the proposed development shall be subject to further impact assessment and review based on the same or different information, requirements or specifications as the governmental authority considers appropriate.

- 11. (29) If the competent governmental authority is unwilling or unable to accept any recommendations of the Review Board or wishes to modify any such recommendations, it shall give reasons in writing within thirty (30) days. stating why it has not accepted the recommendations.

- 11. (30) The decision of the competent governmental authority shall be transmitted to the interested parties and made public.
11. (31) No licence or approval shall be issued that would have the effect of permitting any proposed development to proceed unless the provisions of this section have been complied with.

12. (2) The Yukon North Slope shall fall under a special conservation regime whose dominant purpose is the conservation of wildlife, habitat and traditional native use.

12. (3) Subject to subsections (5) to (15): (a) all development proposals relating to the Yukon North Slope shall be screened to determine whether they could have a significant negative impact on the wildlife, habitat or ability of the natives to harvest wildlife; (b) other uses within the Yukon North Slope shall be considered and may be permitted if it is shown that there would be no significant negative impact on wildlife, habitat or native harvesting. (c) other uses within the Yukon North Slope that may have a significant negative impact on wildlife, habitat or native harvesting shall be permitted if it is decided that public convenience and necessity outweigh conservation or native harvesting interests in the area; and (d) development proposals relating to the Yukon North Slope that may have a significant negative impact shall be subject to a public environmental impact assessment and review process.

12. (23) The appropriate review board shall take into account the following criteria in its consideration of any development proposal:
(a) analysis of the significance of the pan or parts of the Yukon North Slope proposed for development use from the standpoint of conservation and harvesting interests;
(b) evaluation of practical alternative locations and of the relative commercial and economic merits of and environmental impact on such locations compared to the pan or pans of the area proposed for utilisation in the application;
(c) evaluation of the environmental and social impacts of the proposed development;
(d) weighing of the interests of users, conservationists and harvesters in the Yukon North Slope against public convenience and necessity for development;
(e) evaluation of the ability of the applicant to demonstrate that he has or will acquire, the proven capability to carry out the project in accordance, with established standards of performance, safeguard and other requirements and to carry out the necessary environmental mitigation and restoration;
and (f) requirements for effective machinery to ensure that the development proceeds in accordance with any established terms and conditions

Annex Q: Yukon North Slope withdrawal zone and oil and gas dispositions zones

http://www.emr.gov.yk.ca/oilandgas/pdf/Yukon_Land_Status_and_Oil_and_Gas_Interests.pdf
Annex R: National Energy Board area of jurisdiction over oil and gas

*Yellow = NEB Regulator under COGOA
Stripped green = NEB Regulator under OGOA

https://www.neb-one.gc.ca/nrth/index-eng.html
Annex S: Review process for the Beaufort Sea Exploration Joint Venture Drilling Program Project

*Imperial Oil Resources Ventures Limited wanted to drill one or more wells within Exploration Licence EL 476 or 477 (in NWT’s portion of the Beaufort Sea) to extract oil and gas. See Annex T.

Annex T: Exploration Licences 476 and 477

“This map shows where Imperial Oil and BP had planned to drill for oil by 2020. Imperial Oil holds an exploration licence for the yellow parcel on the left; BP holds the licence for the yellow parcel on the right.”

Annex U: Pipelines options for the Alaska Highway Pipeline Project

Northern Natural Gas Pipeline Options

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**Fisheries in the Yukon North Slope and Beaufort Sea**


**Oil and gas**


**Other stakeholders in the Inuvialuit Settlement Region and Beaufort Sea**


