



REQUEST FOR DECISION SUBMISSION TO THE NUNAVUT WILDLIFE MANAGEMENT BOARD

For

Information:

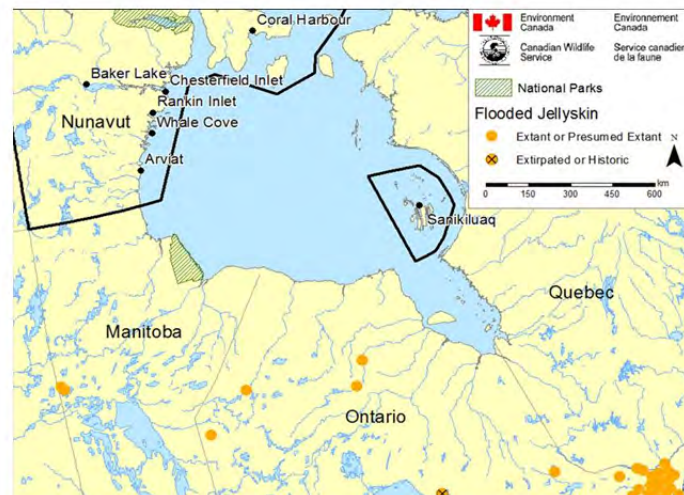
Decision: X

Issue: Proposed Listing of Flooded Jellyskin under the federal *Species at Risk Act*, and potential occurrence in Nunavut



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Flooded Jellyskin



*Known distribution of Flooded Jellyskin in Canada
(COSEWIC Assessment and Status Report)*

Background:

- The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed the Flooded Jellyskin as Special Concern in November 2015.
- The COSEWIC Assessment and Status Report does not include Nunavut in the known distribution of Flooded Jellyskin in Canada. Although speculative, the Canadian Wildlife Service believes it could be possible that the species may occur in southwest Nunavut given the species is found in mid-Manitoba and northern Ontario. The northern extent of the species' distribution has not received much search effort. Flooded Jellyskin is currently found in Manitoba, Ontario and Quebec.
- It is unclear to the Canadian Wildlife Service if community consultations should occur in Nunavut.

- As required under the federal SARA, Environment and Climate Change Canada (ECCC) must consult on the proposed listing of the species under Schedule 1.
- Flooded Jellyskin is a small, grey or bluish-grey (when dry) leafy lichen, and the surface becomes jelly-like when wet. In Canada, the species requires a humid habitat that is chalky and has seasonal flooding. Flooded Jellyskin most often uses ash trees, and less frequently maple, elm and willow.
- Ash trees and their bark are an important habitat for Flooded Jellyskin, but the Emerald Ash Borer is a major threat to ash trees. It is thought that 50% of the Flooded Jellyskin population may be affected within the next few decades. Climate change is also expected to create drier conditions that will reduce seasonal flooding, which the lichen needs to survive.



Flooded Jellyskin at the base of a tree.

Next Steps:

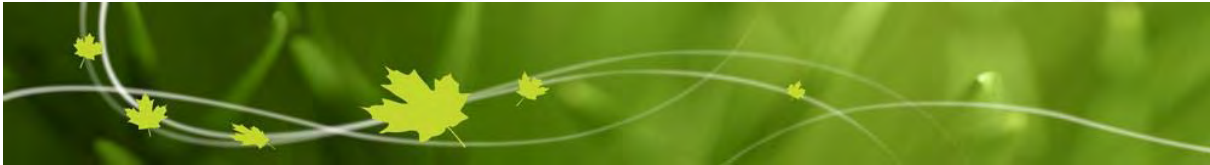
- Environment and Climate Change Canada will be consulting with communities on the proposed listing of Flooded Jellyskin under the federal SARA in the late 2016 / early 2017.

Request to the Board:

That the NWMB considers whether it wishes to be consulted on the proposed listing of Flooded Jellyskin and subsequently make a decision on approving the listing of Flooded Jellyskin under the federal *Species at Risk Act*, or if the NWMB will choose to not perform its decision making function under section 5.2.34(f) of the *Nunavut Land Claims Agreement* with respect to Flooded Jellyskin.

That if the NWMB decides to exercise its decision making function on the Flooded Jellyskin that the NWMB considers whether or not community consultations should occur for the Flooded Jellyskin in Nunavut, and if so which communities ECCC should contact.

Prepared by:
Amy Ganton, Species at Risk Biologist
Canadian Wildlife Service, Yellowknife, NT
Phone: 867-669-4710
2016-Nov-04



Flooded Jellyskin



Proposed Listing as Special Concern under the federal *Species at Risk Act*

Nunavut Wildlife Management Board Meeting
December 2016
Pond Inlet, NU

About Flooded Jellyskin

- Small leafy lichen
- Grey or bluish-grey when dry, the surface becomes jelly-like when wet
- Requires humid habitat that is chalky and has seasonal flooding
- Most often uses ash trees, and less frequently maple, elm and willow



Threats and Limiting Factors

- Ash trees and their bark are important habitat, but the Emerald Ash Borer is a major threat to ash trees. It is thought that 50% of the Flooded Jellyskin population may be affected within the next few decades.
- Climate change is also expected to create drier conditions that will reduce seasonal flooding, which the species needs to survive.



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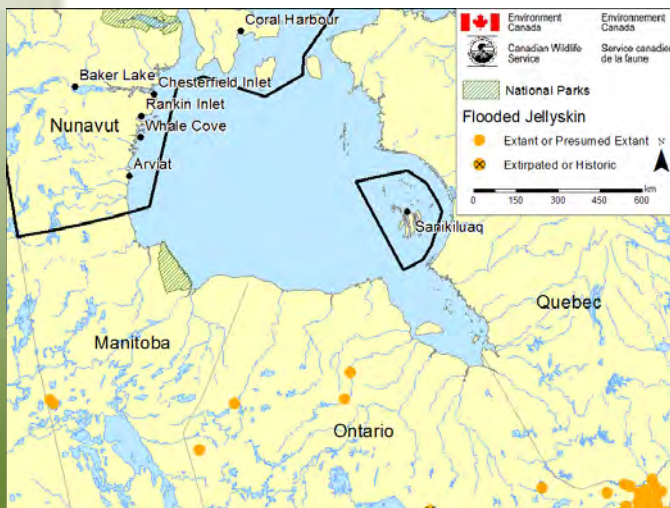
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Flooded Jellyskin – Range

- The COSEWIC Assessment and Status Report does not include Nunavut in the known distribution of Flooded Jellyskin in Canada.
- Flooded Jellyskin is currently found in Manitoba, Ontario and Quebec.



- Although speculative, the Canadian Wildlife Service believes it could be possible that the species may occur in southwest Nunavut given the species is found in mid-Manitoba and northern Ontario. The northern extent of the species' distribution has not received much search effort.



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What are the implications of Special Concern listing?

- Measures to ensure species does not become threatened or endangered
- When a species is listed as Special Concern on Schedule 1 of the *Species at Risk Act* (SARA), a management plan must be prepared within 3 years of the date of listing
- Written in cooperation with Indigenous organizations and Wildlife Management Boards
- No critical habitat



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Next Steps

- Environment and Climate Change Canada will be consulting with communities on the proposed listing of Flooded Jellyskin under the federal SARA in the late 2016 / early 2017.



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Request of the Board

- That the NWMB considers whether it wishes to be consulted on the proposed listing of Flooded Jellyskin and subsequently make a decision on approving the listing of Flooded Jellyskin under the federal *Species at Risk Act*, or if the NWMB will choose to not perform its decision making function under section 5.2.34(f) of the *Nunavut Land Claims Agreement* with respect to Flooded Jellyskin.
- That if the NWMB decides to exercise its decision making function on the Flooded Jellyskin that the NWMB considers whether or not community consultations should occur for the Flooded Jellyskin in Nunavut, and if so which communities ECCC should contact.



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SUBMISSION TO THE NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: X

Decision:

Issue: Development Update of the Management Plan for Dolphin and Union Caribou

Background:

- The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed the Dolphin and Union Caribou as a species of Special Concern in 2004, and the NWT Species at Risk Committee (SARC) assessed the species as Special Concern in 2013.
- Dolphin and Union Caribou were listed under the federal *Species at Risk Act* (SARA) as Special Concern in 2011, and as Special Concern under the territorial *Species at Risk (NWT) Act* in 2015.
- As required under SARA, a management plan must be developed for species listed as Special Concern. The Government of the NWT (GNWT) must also develop a management plan under the territorial species at risk legislation. In cooperation with the Government of Nunavut (GN), all three jurisdictions worked together towards creating a management plan for Dolphin and Union Caribou.
- Environment and Climate Change Canada (ECCC) must have a management plan posted as proposed on the Species at Risk Public Registry by March 2017. ECCC does not have jurisdiction for managing the harvest of Dolphin and Union Caribou, so ECCC will adopt the joint management plan with the exception of the harvest management portion, which will be left to the GNWT and GN for implementation.
- To develop the management plan, ECCC, GNWT and GN held a co-management partners meeting in Kugluktuk in March 2015, and in Cambridge Bay in January 2016. Additional meetings were held via teleconference in 2015 and 2016 to review specific parts of the plan and to receive additional input on the threats calculator portion of the document.
- ECCC, GNWT and GN conducted community consultations on a draft management plan in April 2016, presenting to the Ekaluktutiak and Kugluktuk Hunters and Trappers Organizations (HTOs) and communities. ECCC, GNWT and GN amalgamated the feedback into a comment table, and reviewed and/or incorporated comments into the draft management plan.



- ECCC emailed the comment table to HTOs on June 6, 2016 to ensure the comments captured in the meetings were correct. ECCC followed up with phone calls HTOs about table comments, but did not receive responses from the HTOs. ECCC, GNWT and GN will update the table to show how comments were reviewed and/or incorporated into the document and send the table back to HTOs.
- The first jurisdictional technical review of the draft recovery document was conducted from June 3 to July 8, 2016. ECCC sent the document to the NWMB on June 3, 2016, while the GN sent the document to the HTOs. ECCC did not receive a response about the draft, but the GN received comments from the Ekaluktutiak HTO. ECCC, GNWT and GN worked together to review comments received from other jurisdictions and incorporate them into the recovery document if necessary.
- The second jurisdictional technical review of the proposed management plan was conducted from September 2 to October 7, 2016. ECCC sent the document to the NWMB on September 2, while the GN sent the document to HTOs. ECCC, GNWT and GN will worked together to review comments received during this process and incorporated them into the recovery document if necessary.

Next Steps:

- The proposed recovery document will be posted on the Species at Risk Registry (www.sararegistry.gc.ca) for a 60-day public comment period in the coming months.
- Following the 60-day public comment period, ECCC, GNWT and GN will work together to review and/or incorporate comments received.
- ECCC and the GN will provide the management plan to the NWMB for final approval decision as per the Nunavut Land Claims Agreement s. 5.2.34.

Prepared by:
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 Phone: 867-669-4710
 2016-November-04

Draft Management Plan for Dolphin and Union Caribou



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December 2016

Dolphin and Union Caribou Management – A Shared Responsibility

- Many groups share responsibilities to manage Dolphin and Union caribou
 - Nunavut Land Claim Agreement & Inuvialuit Final Agreement
 - Inuit and Inuvialuit organizations
 - Governments of Nunavut, NWT & Canada
 - Species at risk legislation – federal and NWT

Joint management planning

- A common vision & approach to managing this shared population
- Increase coordination & cooperation
- Avoid duplication of effort



Species at Risk Processes for Canada and NWT – Dolphin and Union Caribou

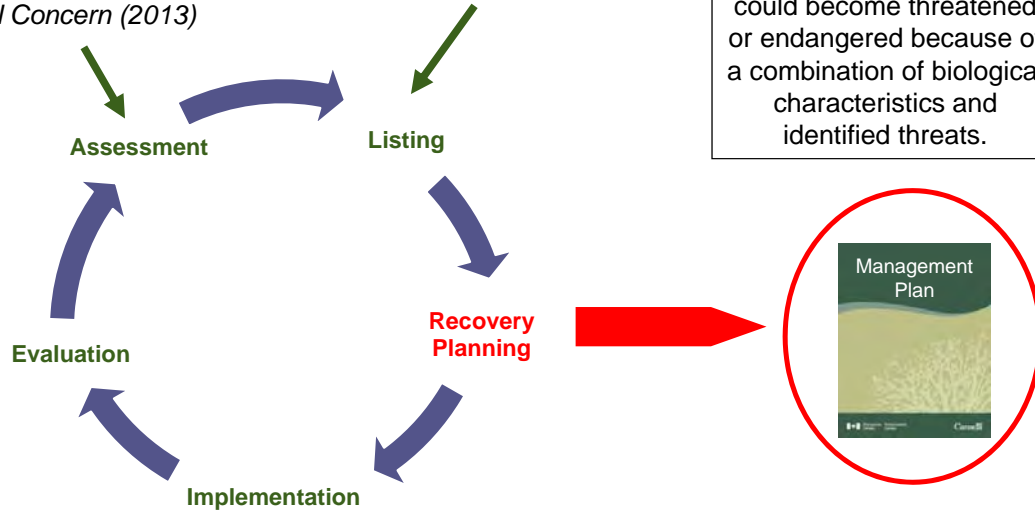
COSEWIC assessed as
Special Concern (2004)

NWT SARC assessed as
Special Concern (2013)

Listed as Special
Concern under SARA
(2011) and Species at
Risk (NWT) Act (2015)

Species of special concern

is a wildlife species that
could become threatened
or endangered because of
a combination of biological
characteristics and
identified threats.



Dolphin and Union Caribou Management Plan

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Adopting the Management Plan

- Environment and Climate Change Canada (ECCC) must have a Management Plan posted on the Species at Risk Public Registry by March 2017
- Government of the NWT must also produce a management plan under its species at risk legislation
- In cooperation with the Government of Nunavut, all three jurisdictions worked together towards creating a management plan for Dolphin and Union caribou
- ECCC does not have jurisdiction for managing the harvest of Dolphin and Union caribou. Therefore, ECCC will adopt the joint management plan, with the exception of the harvest management portion which will be left to the Governments of Nunavut and NWT for implementation.
- Government of the NWT and the Wildlife Management Advisory Council (NWT) will develop an agreement on accepting the plan
- Government of Nunavut will submit the plan to the Nunavut Wildlife Management Board for approval

Dolphin and Union Caribou Management Plan

Slide 4

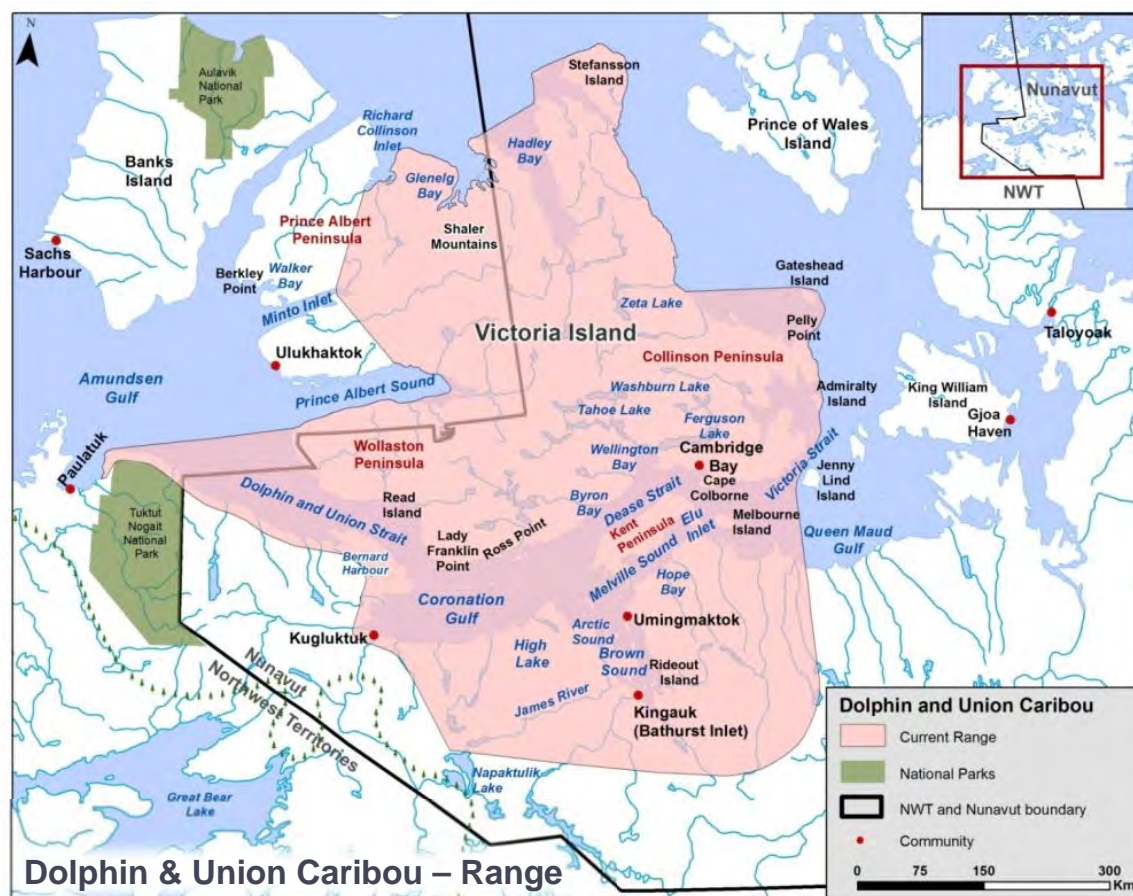
Dolphin & Union Caribou – Description

- Best identified using a combination of characteristics
 - Short muzzles with short, wide hooves but slightly narrower than Peary caribou
 - Characteristic pelage patterning of Peary caribou but slightly darker
 - Larger and thicker antlers than Peary caribou
 - Grey antler velvet
- Migrate in the fall and spring between Victoria Island and the mainland



Dolphin and Union Caribou Management Plan

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Population Sizes and Trends

- Some community members need to travel farther now to harvest caribou, and recent research indicates a decline in the population
- First population estimate in 1997 of 27,948 caribou, and the second estimate in 2007 of 21,753 caribou.
- 2015 assessment: estimate of 18,413 \pm 6,795 caribou. Gaps in research and monitoring data combined with a lack of information on inter-annual variability prevent a status trend determination at this time.



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Dolphin and Union Caribou – Threats in Canada

- Overall threat impact for Dolphin and Union caribou is **Very High – High**

THREAT	IMPACT
Marine traffic	High
Competition and Predation	High - Low
Harvest	Medium - Low
Parasites, Diseases & Insect harassment	Medium - Low
Climate Change	Medium - Low
Resource extraction	Low
Roads and Railroads; Flight Paths	Low
<i>Human Disturbance; Residential and Commercial Development; Utility and Service Lines</i>	<i>Negligible</i>
<i>Interbreeding</i>	<i>Unknown</i>
<i>Oil and Gas Drilling; War, Civil Unrest and Military Exercises; Garbage and Solid Waste</i>	<i>Impact not calculated</i>

Threats in Canada

- Year-round marine traffic could prevent spring and fall migrations, delay crossings, or increase the risk of drowning
- Climate change
 - Sea ice loss can cause caribou drowning or dying soon after emerging from water, increase staging time, or prevent movement across ice.
 - Vegetation may change, and icing events may increase.
- Predation and competition
 - Wolves are the main predator. Grizzly bears may have a limited impact on caribou.
 - Either avoid or share habitat with muskoxen depending on the area.
 - Overabundant geese could destroy caribou habitat.
- Harvesting is occurring but levels are currently unknown and reporting is not mandatory for subsistence harvest.

Threats in Canada

- Diseases could be spread through contact with muskoxen and other caribou, while climate change is causing new/more insects/parasites in the Arctic and increased insect harassment to caribou
- Extraction projects and Roads could impact migration routes and winter feeding grounds, while scheduled flights could disturb caribou if they overlap with calving grounds.
- Timing and flight height of unscheduled flights are a concern, particularly over calving grounds
- Unclear what impact interbreeding with other caribou species will have on Dolphin and Union caribou

Management Goal

Recognizing the ecological, cultural and economic importance of Dolphin and Union Caribou, the goal of this management plan is to maintain the long term persistence of a healthy and viable Dolphin and Union Caribou population that moves freely across its current range and provides sustainable harvest opportunities for current and future generations.



Dolphin and Union Caribou Management Plan

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Management Objectives & Approaches

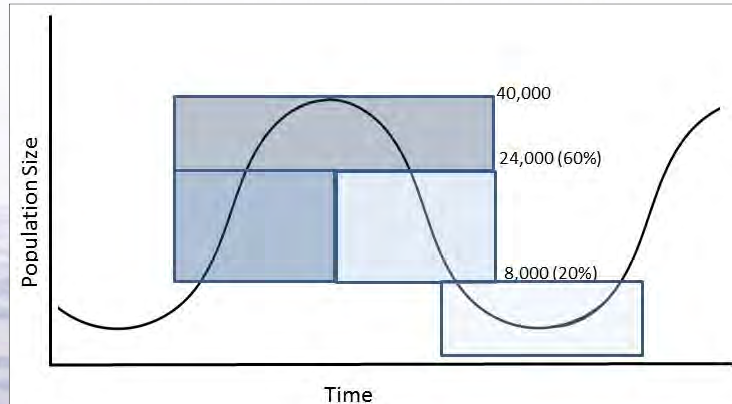
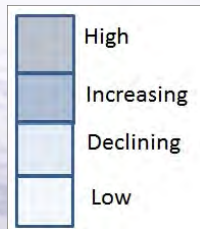
There are five management objectives:

1. Adaptively co-manage DU Caribou using a community-based approach.
2. Communicate and exchange information on an ongoing basis between parties to ensure a collaborative and coordinated approach.
3. Collect information to fill knowledge gaps on DU Caribou using IQ and TK, community monitoring and scientific methods.
4. Promote minimal disturbance to habitat (particularly sea-ice crossings) to maintain the ability of DU Caribou to move freely across their range.
5. Ensure management is based on population status so future generations can benefit from sustainable harvesting opportunities.

Management Actions Based on Population Status

- For each phase of the Dolphin-Union caribou population cycle, the management plan recommends certain actions, including harvest management, to reflect the conservation issues.

Population Size



- Other indicators such as climate change, recruitment, and changes to distribution, will also be considered

Management Action Examples

High 	<ul style="list-style-type: none"> Educate harvesters and youth on how to harvest respectfully. No harvest restrictions on beneficiaries. Support reporting of harvest and community-based monitoring programs. Working group of stakeholders meets.
Decreasing 	<ul style="list-style-type: none"> Educate and integrate information into the school system (ex. importance of using the whole caribou). Increase research and monitoring; have sample kits to monitor harvest. The working group of stakeholders should meet more frequently.
Low 	<ul style="list-style-type: none"> Educate people on the new restriction and management in place. Consider establishing effective mandatory mechanisms to reduce overall harvest. Support reporting of harvest and community-based monitoring program.
Increasing 	<ul style="list-style-type: none"> Easing of harvest restrictions and consider implementing non-quota limitation. Encourage research on predators and ease management of predators. Maintain industry restrictions. Working group of stakeholders meets.

Consultation Process

Date	Meeting <i>Meeting Lead Organization</i>	Attendance by Nunavut Organizations <i>Invited but did not attend</i>
2014 December 8	Threat Calculator Exercise - Teleconference <i>ECCC</i>	Kugluktuk HTA, KRWB, GN <i>Ekaluktutiak HTA, Burnside HTA, NTI, NWMB</i>
February 18	Introductory Meeting – Yellowknife, NT and Phone <i>ECCC</i>	Kugluktuk HTA, Umingmaktok HTA, Ekaluktutiak HTA, Gjoa Haven HTA, KRWB, NTI, GN
2015 March 25-27	First Joint Meeting – Kugluktuk, NU <i>GN, GNWT, ECCC</i>	Kugluktuk HTA, Ekaluktutiak HTA, KRWB, NTI, KIA, GN <i>NWMB</i>
October 26	Framework Review – Teleconference <i>GN, GNWT</i>	Burnside HTA, Ekaluktutiak HTA, KRWB, NTI, KIA, NWMB, GN

Consultation Process

Date	Meeting <i>Meeting Lead Organization</i>	Attendance by Nunavut Organizations <i>Invited but did not attend</i>
January 11-13	Second Joint Meeting – Cambridge Bay, NU <i>GN, GNWT, ECCC</i>	Kugluktuk HTA, Burnside HTA, Ekaluktutiak HTA, NTI, KRWB, GN <i>Omingmaktok HTA, NWMB</i>
February 8	Threat Calculator Exercise – Teleconference <i>ECCC</i>	Ekaluktutiak HTA, KRWB, GN <i>Kugluktuk HTA, Omingmaktok HTA, Burnside HTA, NTI, KIA, NWMB</i>
2016 April 19	Draft Consultation with the Ekaluktutiak HTA and Community of Cambridge Bay, NU <i>GN, ECCC</i>	Ekaluktutiak HTA, Burnside HTA, GN
April 28	Draft Consultation with the Kugluktuk HTA and Community of Kugluktuk, NU <i>GN, ECCC</i>	Kugluktuk HTA, GN

Consultation Process/Results

- Community consultations were conducted in April 2016
 - Incorporated feedback into draft management plan
 - Emailed meeting comment table back to the HTOs for review on June 6, 2016. Phone calls were made to the HTOs but no responses were received. The table has been updated to show how comments were reviewed and/or incorporated into the document and returned to the HTOs.
- ECCC sent the draft document to the NWMB on **June 3, 2016** for the first jurisdictional technical review. GN sent the document to the HTOs.
- ECCC sent the proposed document to the NWMB on **September 2, 2016** for the second jurisdictional technical review. GN sent the document to the HTOs.

Changes to the Management Plan

- Many comments received from the First Jurisdictional Review were minor edits and suggestions to re-organize information within the plan
- Some of the major changes to the plan include:
 - Information about the 2015 population estimate was added.
 - An additional knowledge gap was added: Potential impact of future development on Dolphin and Union caribou. The Knowledge gaps were prioritized.
 - A 'Threats and/or knowledge gaps addressed' column was added on the 'Approaches to Management' table to link back to the initial reason for concern and how concerns are addressing.
 - A new section was added, 'Measuring Progress', to define and measure progress toward achieving the management goal.
- A summary of the changes to each section of the plan was provided to NWMB in a separate document



Next Steps

- The proposed document will be posted for review by:
 - Environment and Climate Change Canada on the Species at Risk Public Registry for a 60-day public consultation period
- Following the public comment period, ECCC, GNWT and GN will work together to review and incorporate comments received.
- ECCC and GN will provide the proposed final management plan to the NWMB for final approval decision as per the Nunavut Land Claims Agreement s.5.2.34.



Request of the Board

The NWMB provide feedback or any concerns on the material presented today.



SUBMISSION TO THE NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: X

Decision:

Issue: Development Update of the Recovery Strategy for Peary Caribou

Background:

- The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed the Peary Caribou as an Endangered species in 2004. In November 2015, COSEWIC reassessed the caribou as Threatened.
- Peary Caribou were listed under the federal *Species at Risk Act* (SARA) as Endangered in 2011. As required under SARA, a recovery strategy must be developed for species listed as Endangered or Threatened.
- To develop the recovery strategy, ECCC worked with HTOs/HTCs, communities, wildlife management boards and territorial governments in the Northwest Territories and Nunavut. ECCC held in-person consultations with communities, “all-chairs” meetings in Yellowknife that included the chairs of the HTOs/HTCs, and teleconferences to keep co-management partners informed of the process.
- ECCC conducted community consultations on a draft recovery strategy from February-March 2016, presenting to the Ekaluktutiak (Cambridge Bay), Gjoa Haven, Spence Bay (Taloyoak), Kurtaairojuark (Kugaaruk), Resolute Bay and Iviq (Grise Fiord) Hunters and Trappers Organizations (HTOs) and communities. ECCC amalgamated the feedback into a comment table, and reviewed and/or incorporated comments into the draft document.
- ECCC emailed the comment table to HTOs on June 2, 2016 to ensure the comments captured in the meetings were correct. ECCC followed up with phone calls HTOs about table comments, but did not receive responses from the HTOs. ECCC will update the table to show how comments were reviewed and/or incorporated into the document and send the table back to HTOs.
- The first jurisdictional technical review of the draft recovery document was conducted from May 27 to August 30, 2016, and ECCC sent the document to the NWMB, GN, wildlife management boards and HTOs. From Nunavut, ECCC received comments from the GN. ECCC is reviewing all comments received and incorporating them into the recovery document if necessary.



- In November 2015, COSEWIC re-assessed Peary Caribou as Threatened. ECCC will be conducting community consultations in late 2016 / early 2017 about the downlisting. A recovery strategy is also required for Threatened species and will not impact the current process underway.

Next Steps:

- HTOs will be presented with the latest draft recovery strategy for review. ECCC will review any comments received from HTOs and update the draft document as needed.
- The second jurisdictional technical review of the draft recovery strategy is planned for the fall/winter. ECCC will send the document to the NWMB, GN, wildlife management boards, RWOs and HTOs for review and feedback.
- The proposed recovery document will be posted on the Species at Risk Registry (www.sararegistry.gc.ca) for a 60-day public comment period.
- Following the 60-day public comment period, ECCC will review and/or incorporate comments received.
- ECCC will provide the proposed final recovery document to the NWMB for final approval decision as per the Nunavut Land Claims Agreement s. 5.2.34.

Prepared by:
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Phone: 867-669-4710
2016-Nov-04



Recovery Strategy for Peary Caribou in Canada



Tyler Kydd

Species at Risk Program
Canadian Wildlife Service
Yellowknife, NT
December 2016

Federal *Species at Risk Act* (SARA) Process – Peary Caribou

COSEWIC assessed as
-Threatened (2015)
-Endangered (2004)

Listed as Endangered
under SARA (2011)

Threatened species is a wildlife species that is likely to become endangered if limiting factors are not reversed.

Endangered species is a wildlife species facing imminent extirpation or extinction.



Our collaborators and partners

- Worked collaboratively with co-management partners
- Hunters and trappers committees in NWT and Nunavut
- Communities – elders, harvesters, key knowledge holders
- Governments of the NWT and Nunavut
- Parks Canada



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Peary Caribou – Description

- Smallest caribou in North America
- Short muzzles with short, wide hooves
- Winter coat: long and mainly white
- Summer coat: white below and slate-coloured above
- Smaller and thinner antlers than Dolphin and Union caribou
- Grey antler velvet



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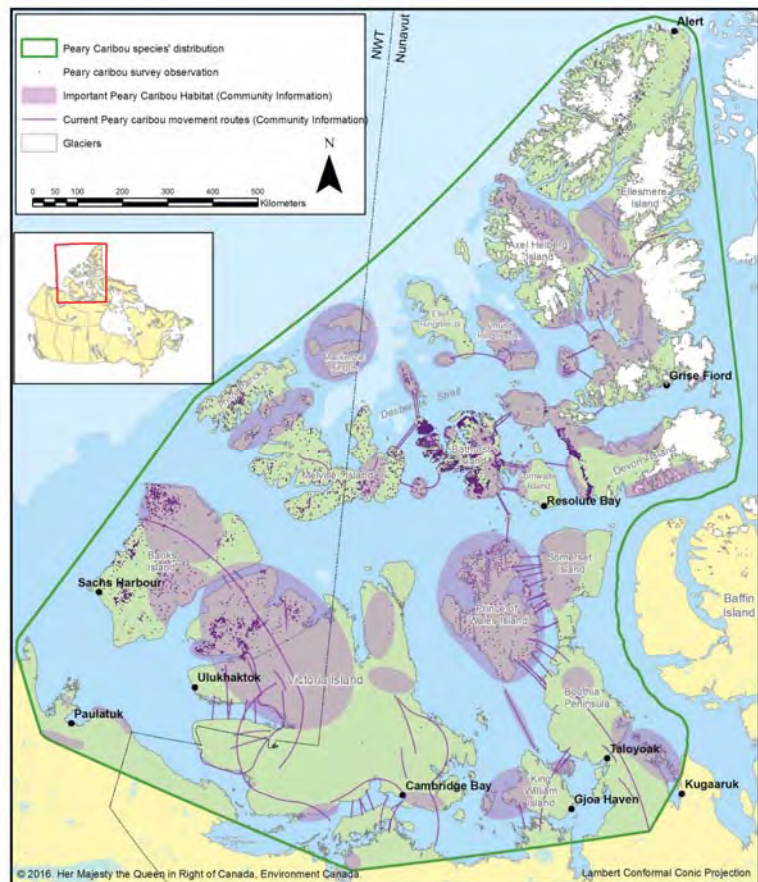
Use Best Available Data

- Peary Caribou species' distribution
- Peary Caribou survey observation
- Important Peary Caribou Habitat (Community Information)
- Current Peary Caribou movement routes (Community Information)
- Glaciers



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Peary Caribou – Range

Divided into four local populations:

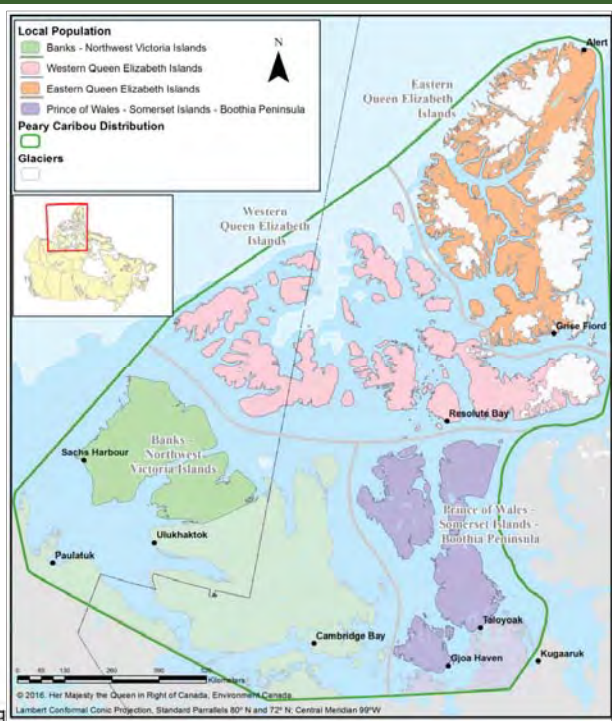
- Banks – Northwest Victoria Islands
- Western Queen Elizabeth Islands
- Eastern Queen Elizabeth Islands
- Prince of Wales – Somerset Islands – Boothia Peninsula



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Population Sizes and Trends

- Accurate local population estimates are challenging because the Arctic Archipelago is remote, difficult weather conditions for surveying, Peary caribou are sparsely populated, and they make large and unpredictable movements between islands
- Populations naturally cycle and die-offs occur periodically
- Estimates are based on the best available information
- Communities indicated Peary caribou are currently doing well and they may not be declining but moving to different areas



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Population Sizes and Trends

#	Terr	Local Population Unit	Island	Most Recent Population Estimate (includes calves)		Population Trend		Local Short Term Assessment (community) ²
				Year	Area Corrected Estimate ¹	Short-term (10 year)	Long-term (30 year)	
1	NT	Banks - Northwest Victoria Islands	Banks	2014	2742	Increasing	Decreasing	Increasing
			NW Victoria	2010	299			
2	NT-NU	Western Queen Elizabeth Islands	Melville	2012	3224	Unknown	Increasing	Increasing
			Prince Patrick	2012	3067			
			Eglinton	2012	214			
			Emerald	2012	45			
			Byam Martin	2012	153			
			Devon	2016	14			
			Lougheed	2016	140			
			Bathurst	2013	1463			
			Cornwallis	2013	4			
			Little Cornwallis	2013	1			
			Helena	1997	0			
3	NU	Eastern Queen Elizabeth Islands	Axel Heiberg	2007	2255	Unknown	Unknown	Unknown
			Ellesmere	2006	918			
4	NU	Prince of Wales – Somerset Islands – Boothia Peninsula	Prince of Wales	2004	0	Unknown	Decreasing	Unknown
			Somerset	2004	0			
			Russell	2004	0			
			Boothia	2006	1			

¹ The original survey results were area-corrected meaning that they were extrapolated from study areas to whole islands using a consistent island area measurement to aid in comparison across years. Adjusted to include calves.

² Local Short Term Assessments are from community technical meetings

Peary Caribou – Threats in Canada

- Overall threat impact for Peary caribou is **Very High – Medium**
- Highest impact threats are from a changing climate

Threat	Impact
Climate Change	High - Medium
Marine traffic	Medium - Low
Parasites and Disease	Medium - Low
Resource extraction	Low (with potential to become High)
Competition and Predation	Low
Human Disturbance	Low
Harvesting	Low
Pollution / Contaminants	Unknown



Threats in Canada

- Climate Change:
 - Icing events may increase; vegetation changes; sea level rise
 - Sea ice loss: caribou drowning; restricts caribou travel between islands
- Marine Traffic:
 - Marine traffic in spring/fall can break up sea ice or prevent sea ice from forming
 - Sea ice is an important part of Peary caribou habitat allowing migrations between islands.
- Parasites and Diseases:
 - Peary caribou are currently healthy, but concerns are present that climate change could bring more insects/parasites due to warmer temperatures, and increase interaction with other caribou that may have diseases not common to Peary Caribou.



Threats in Canada

- Resource Extraction:
 - Currently low impact when considered across entire Peary caribou range. Impact within a particular area can be high
 - Pollution and contaminants left behind from previous activities continue to impact caribou
- Competition/Predation:
 - Wolves: main predator of caribou, and populations are maintained by muskoxen and other prey when caribou not available
 - Increasing predation from predators such as polar bears, grizzly bears and wolverines
 - Caribou avoid muskoxen and are believed to compete with caribou for forage in some areas.
- Human Disturbance:
 - Can cause caribou to avoid the disturbance or leave the area altogether, interrupt foraging, and impact the health of the caribou
 - Includes disturbance from unscheduled aircrafts and helicopter flights, snow machines, military exercises and tourism



Threats in Canada

- Harvesting:
 - Not a threat to Peary caribou under current management conditions
 - Voluntary harvest restrictions have been put in place by many communities
- Pollution and Contaminants:
 - Arctic may receive pollution brought in by air currents
 - Past activities have left pollution and contaminants that are thought to effect the health of Peary caribou



Tyler Kydd



Population and Distribution Objectives

- Maintain Peary caribou in all areas of Canada where they currently exist
- Peary caribou local populations fluctuate within the normal bounds of population cycles
- All Peary caribou local populations are healthy (self-sustaining) and available for future generations
- Peary caribou are able to move freely on the land and sea ice (within and between islands) to ensure natural habitat use and migration (limit unnatural movements / not forced to move), as well as migration during catastrophic events such as weather
- Peary caribou local populations are able to support a sustainable Inuit/Inuvialuit harvest that is responsive to fluctuations in populations



Critical Habitat

- Critical habitat is habitat needed for survival or recovery of a wildlife species that is identified in a recovery strategy or action plan
- Required for Endangered/Threatened species
- Once identified Critical Habitat must be protected from destruction
- Suggesting Partial identification of Peary caribou critical habitat
 - Identified to the extent possible given the best available information
- A schedule of studies identifies research needed to address the information gaps



Candidate Critical Habitat Zones

ZONE	DESCRIPTION
Sea Ice Habitat	Movement corridors on sea ice identified by communities
Land Habitat	Land areas predicted to be used by Peary caribou in at least one of two reproductive seasons, or as movement corridors. Based on community information and model results








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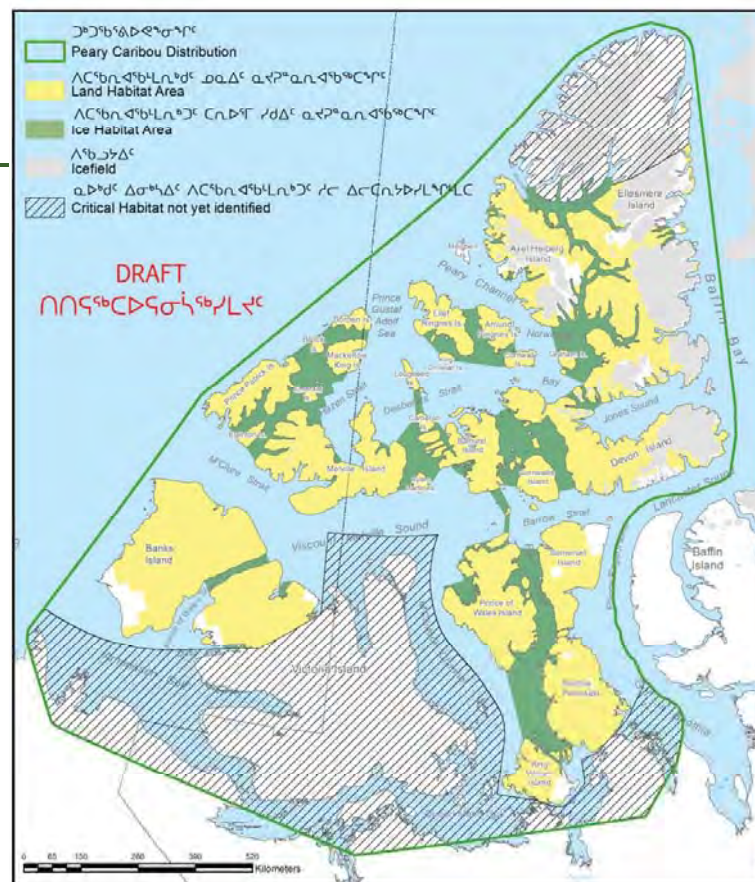
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DRAFT

-  Peary caribou Distribution
-  Land Habitat Area
-  Ice Habitat Area
-  Icefield
-  Habitat not yet identified



Biophysical Attributes

- Within the land habitat boundaries, the biophysical attributes can be used to identify critical habitat
- List of characteristics, such as
 - Geographic features (eg. elevation, topography)
 - Vegetation types
- The biophysical attributes will vary over space and time according to the Peary Caribou life stages and the need to move among the landscape to meet their life process requirements and avoid severe weather events.



Activities Likely to Destroy Critical Habitat (examples)

Description of Activity	Description of Effect
<u>Sea Ice Habitat:</u> Marine traffic that breaks sea ice or prevents ice from forming.	Icebreaking or marine traffic that prevents the formation of sea ice prevents the use of the habitat as a safe passage between islands.
<u>Land Habitat:</u> Large scale terrestrial developments or exploration activities that prevent Peary Caribou in any local population from accessing the forage required for survival. (To be evaluated on a case-by-case basis)	Development and exploration could destroy or block access to a portion of forage such that Peary Caribou in any local population no longer have access to enough forage for survival and recovery.



Schedule of Studies

Description of Activity

Map Critical Habitat on Northern Ellesmere Island

Population surveys on Northern Ellesmere Island

Determine habitat quality within each local population for various life stages at a local scale.

Improve understanding of biophysical attributes at a local population scale

Determine the scale and intensity of human activities that will destroy critical habitat



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Strategic Direction for Recovery

There are four broad strategies identified for achieving the population and distribution objectives:

- *Monitoring and research*
- *Habitat and species conservation and management*
- *Education and awareness, stewardship, and partnerships*
- *Law and policy*



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Broad Strategies	Example Approaches
Monitoring and research	Investigate population structure and movement patterns between Islands and local populations
Habitat and species conservation and management	Minimize disturbance especially in calving areas and during sensitive periods
Education and awareness, stewardships and partnerships	Promote education amongst harvesters about traditional and best practices to minimize wastage, alternative food sources, and awareness of illegal harvest
Law and Policy	Develop, implement and promote beneficial management practices for the species and its habitat (e.g. wildlife plans for the mining/oil and gas exploration/industry, etc.)



Consultation Process

- ECCC worked with jurisdictions, organizations, HTOs and communities to develop a draft recovery strategy (timeline on following slides)
- ECCC consulted with communities on a draft, and provided meeting notes back to the HTOs to ensure the information recorded was correct. No feedback was received, and a final version of the notes will be returned to HTOs.
- ECCC sent the draft document to the NWMB, the GN and HTOs on May 27, 2016 for the first jurisdictional technical review. The comment period closed August 30, 2016. In Nunavut, ECCC received comments from the GN.
- ECCC is reviewing comments received and revising the draft document. ECCC plans to send out the document for the second jurisdictional technical review in 2017.



Consultation Process

Date	Meeting	Attendance by Nunavut Organizations
2011	Nov 04 Introductory Meeting Grise Fiord	Iviq HTO
	Nov 05 Introductory Meeting Resolute Bay	Resolute Bay HTO
2012	Feb. 09 Administrative Committee Introductory Meeting	
	Oct. 16-18 Technical Preparatory Meeting	Resolute Bay HTO, Ekaluktutiak HTA, Gjoa Haven HTA, Spence Bay HTA, KRWB
2013	Feb. 19 Resolute Bay HTO & Community Technical Meetings	Resolute Bay HTO
	Feb. 20-21 Iviq HTO & Community Technical Meetings	Iviq HTO
	Feb. 26 Ekaluktutiak HTA & Community Consultation	Ekaluktutiak HTA, KRWB
	Feb. 27 Spence Bay HTO & Community Consultation	Spence Bay HTA, KRWB
	Feb. 28 Gjoa Haven HTA & Community Consultation	Gjoa Haven HTA



Consultation Process

Date	Meeting	Attendance by Nunavut Organizations
2013	Oct. 22-24 All-Chairs Meeting	Resolute Bay HTO, Iviq HTO, Kurtaairojuark HTA, Gjoa Haven HTA, Spence Bay HTA, QWB, KRWB
	Dec. 16 Critical Habitat Update	Resolute Bay HTO
	Dec. 18 Population Viability Analysis Teleconference	
2014	Sept. 9 Threat Calculator Training	Resolute Bay HTO
	Sept. 12 Threat Calculator Meeting	Resolute Bay HTO, Spence Bay HTA
2015	Feb. 17-19 All-Chairs Meeting	Resolute Bay HTO, Ekaluktutiak HTA, Kurtaairojuark HTA, Gjoa Haven HTA, Spence Bay HTA, KRWB



Consultation Process

Date	Meeting	Attendance by Nunavut Organizations
2015	Nov 25, Dec 1, 8, 15	Teleconferences to review key pieces of Recovery Strategy
		Resolute Bay HTO, Iviq HTO, Ekaluktutiak HTA, Gjoa Haven HTA, Kurtaairojuark HTA, Spence Bay HTA
2016	Feb. 22	Ekalkututiak HTA and Community Consultation
		Ekalkututiak HTO
	Feb. 23	Gjoa Haven HTA Consultation
	Feb. 24	Gjoa Haven HTA
	Feb. 24	Spence Bay HTA and Community Consultation
	Feb. 24	Spence Bay HTA
	Feb. 25	Kurtaairojuark HTA and Community Consultation
		Kurtaairojuark HTA
	Feb. 29	Iviq HTO and Community Consultation
	Mar. 1	Iviq HTO
		Resolute Bay HTO and Community Consultation
		Resolute Bay HTO



Next Steps

- 1) Seek input on the draft recovery strategy
 - Community review
 - Second Jurisdictional Technical Review
 - Comments received and considered; *proposed* recovery strategy developed
- 2) Proposed recovery strategy posted on the SARA public registry for a 60-day public comment period
 - Comments received and considered; *proposed final* recovery strategy developed
- 3) Seek approval on the document from the NWMB
- 4) Final recovery strategy posted on the SARA public registry
- 5) Jurisdictions produce Action Plans



Request of the Board

ECCC requests that the NWMB provide feedback or concerns on the material presented today.



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