

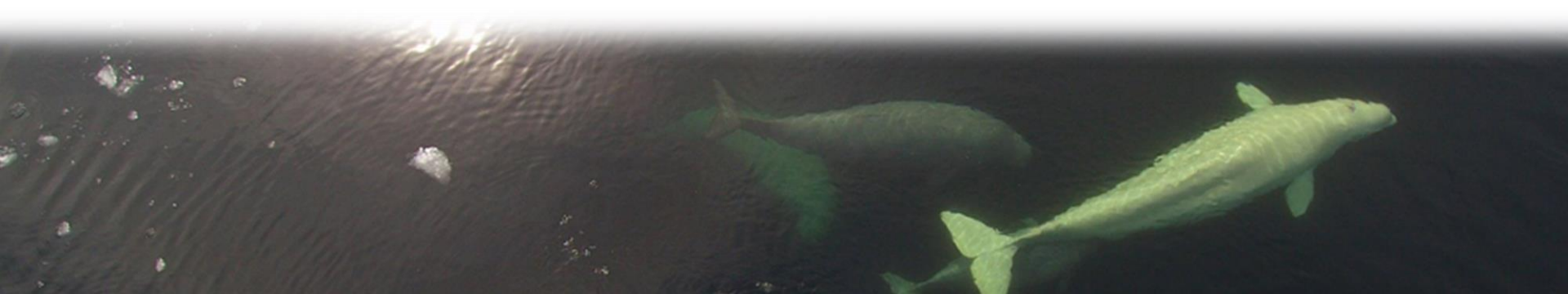
*Nunavik Marine Region Wildlife Board
(NMRWB)*

*Eeyou Marine Region Wildlife Board
(EMRWB)*

Beluga Public Hearing

This Presentation:

1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

WHAT IS THE NMRWB?

- Co-Management Board
 - Wildlife Management Decisions
- 6 Board Members + Chair
 - Appointed by **Government** and **Makivik**
- Head office in Inukjuak

- Make decisions based on
The Best Available Science and Inuit Knowledge



NMRWB/EMRWB Beluga Public Hearing

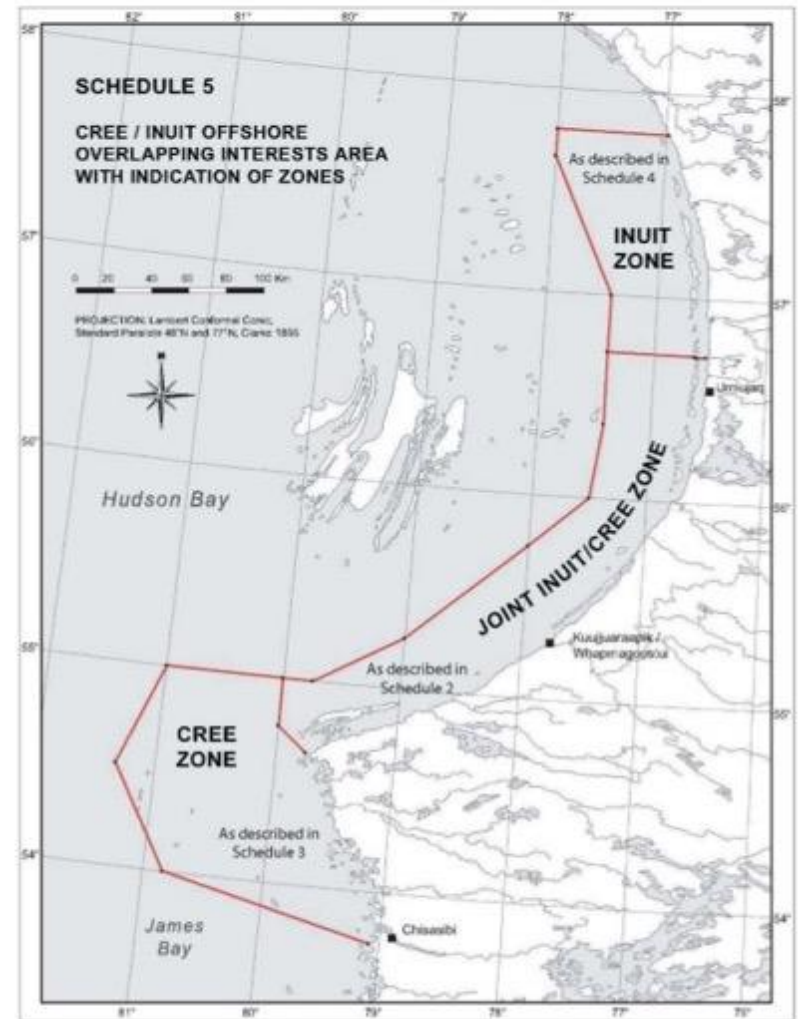
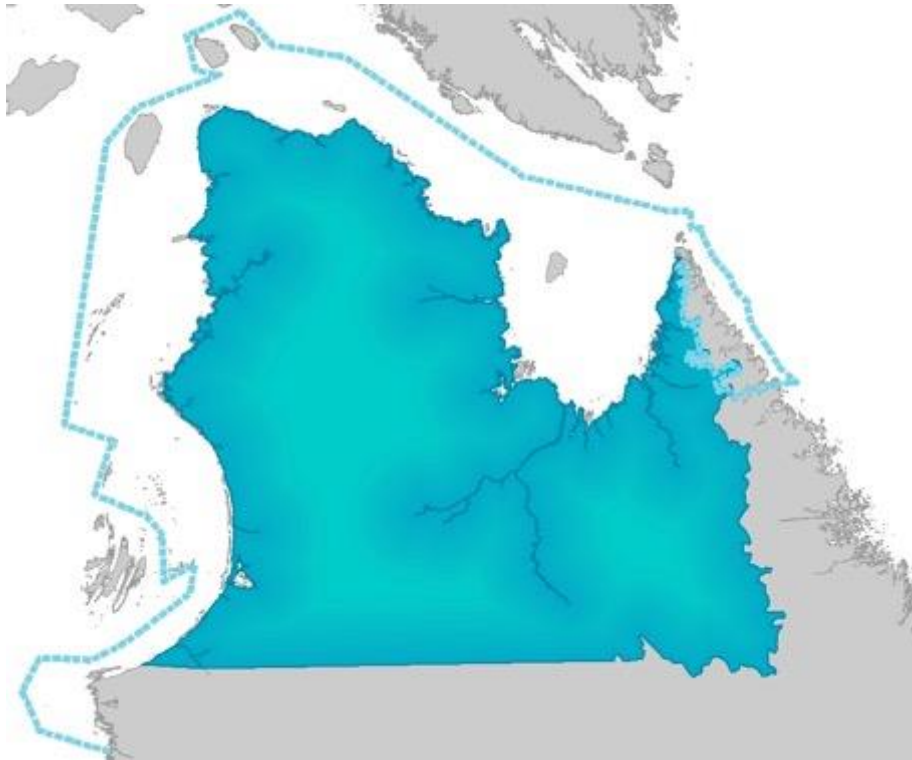


1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

WHAT IS THE EMRWB?

- Very similar to NMRWB in structure
- Jurisdiction over the Eeyour Marine Region (Eastern James Bay)
- Jurisdiction overlaps with the Nunavik Marine Region





NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
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WHAT IS A PUBLIC HEARING?

- Different from a Meeting
- A chance for Decisions Makers to
 - Gather Evidence
 - Hear from all parties
- Not the place for Making Decisions
- But VERY important for informing decisions



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
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WHY HOLD A PUBLIC HEARING?

- Chance for the Boards to hear from Parties:
Rights Holders and Signatories
- Chance for Boards to Question Parties
- Chance for Parties to Question each other

- Provides the Boards with Information
in order to make Decisions



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WHO ATTENDS THE HEARING?

- It is public – anyone can attend
- Some organizations and people have “Party Status”
 - They have the right to present evidence, and question the evidence of other parties



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

SCHEDULE

- Introductions
 - Chairs
 - Background information
- Presentations and question periods
 - Day 1: Regional Organizations
 - Day 2: Hunting Associations
 - Day 3: Individuals and elders
- Closing Statements

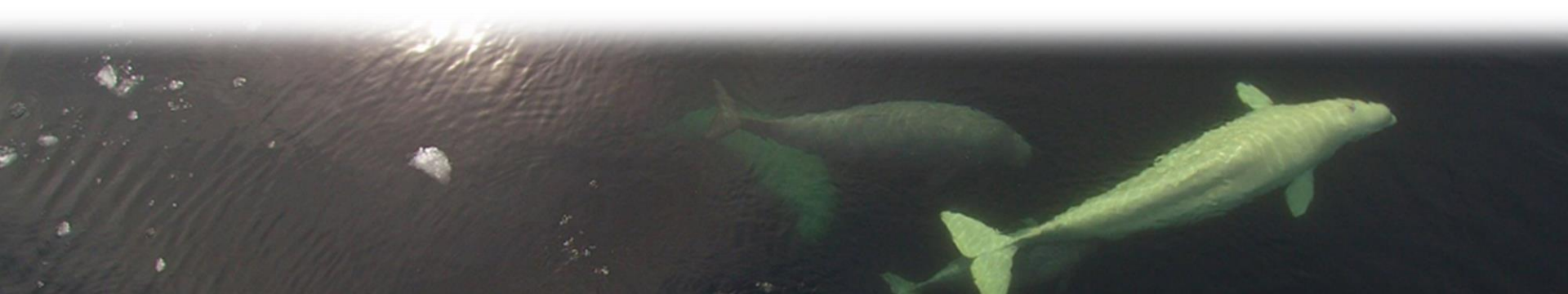


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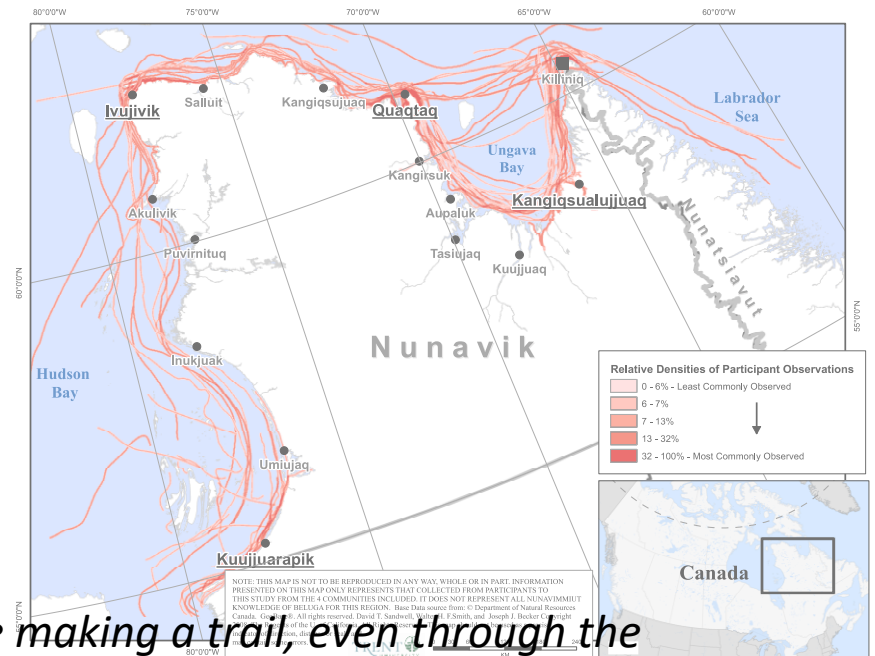
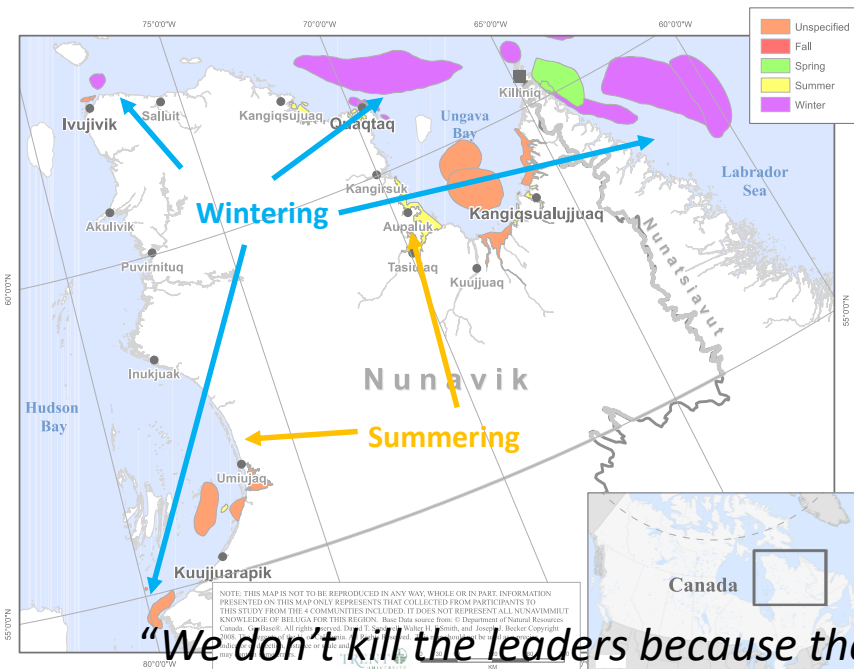
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1. Migratory Routes
 2. Genetics and Stocks
 3. Stock Population sizes
 4. Ungava Beluga New Information



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1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation



“We don’t kill the leaders because they’re making a trail, even through the water” (Paul Jararuse, Kangiqsualujuaq).

“All animals have leaders. ... Same thing for the caribou. They have a leader. The belugas are tracking each other (in the water). Like the caribou tracking for the other leaders.... So that’s their knowledge...” (David Okpik, Quaqtaq)

(Breton-Honeyman et al. 2017)

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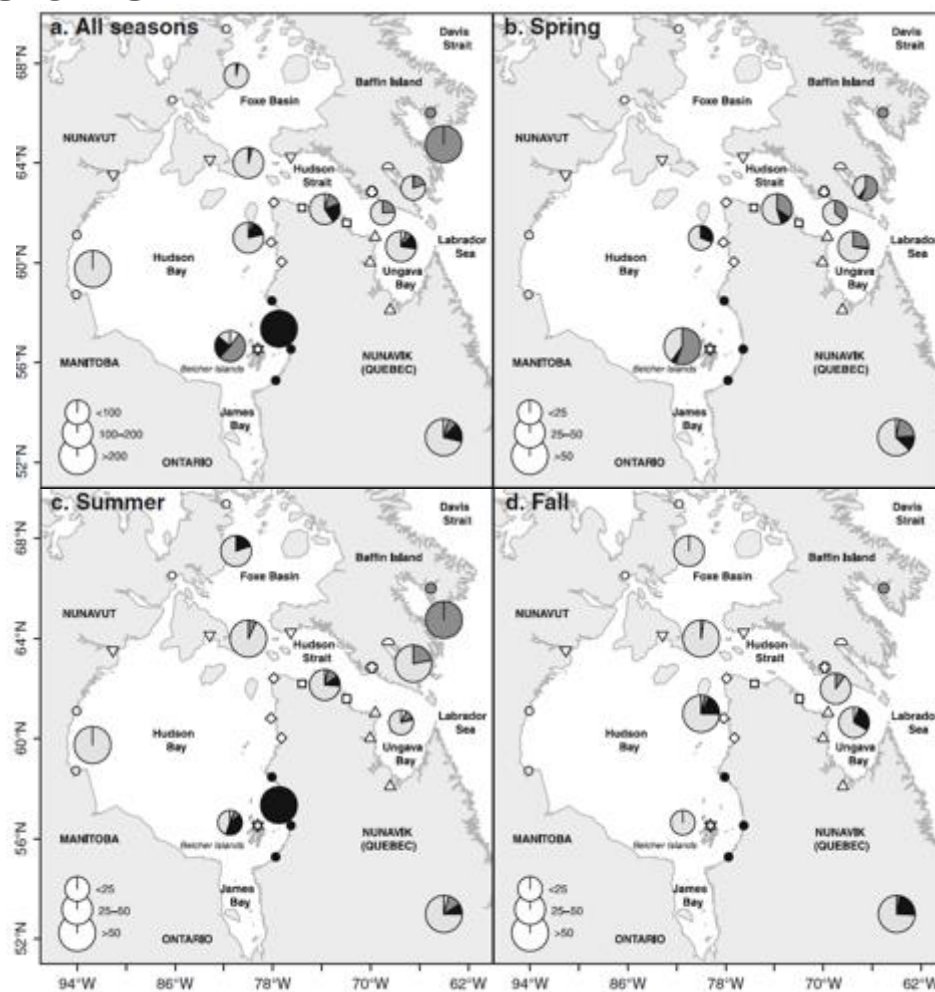
1. Public Hearing Information
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3. Management and Conservation

2. Genetics and Stocks

- Genetics comes from harvested samples
- Genetics tell us there are different groups from different areas
- Beluga related to each other travel together during migration
- Migration routes are maternally transmitted

In the Nunavik Marine Region:

- 4 stocks of beluga are associated with distinct summering areas

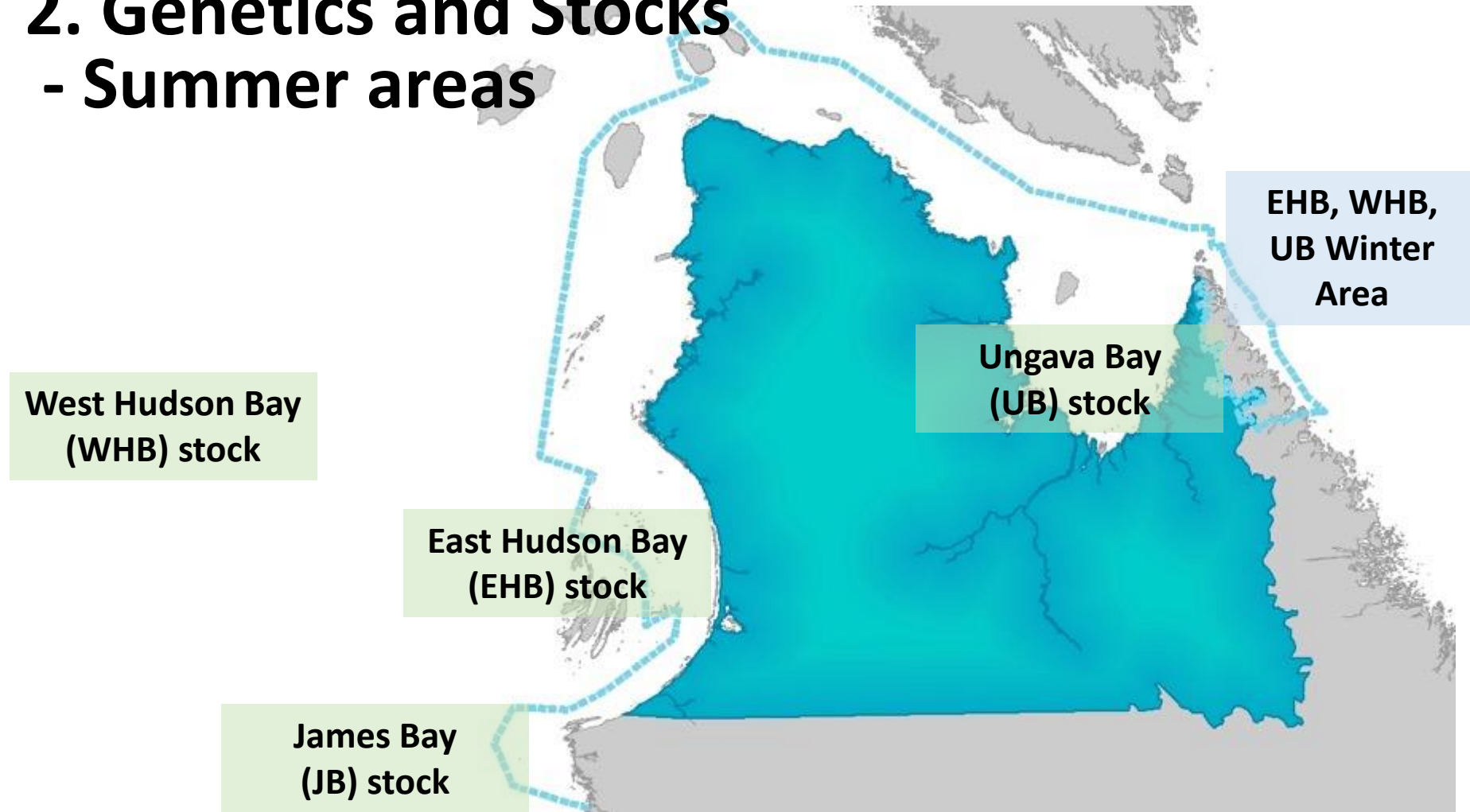


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2. Genetics and Stocks - Summer areas



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3. Stock population sizes

Beluga stock	Estimated historical abundance (year)	Abundance estimates (year)	COSEWIC stock status
Eastern Hudson Bay (EHB)	8,000 – 11,600 (pre-1854) ^{2,8}	3,800 ^{1,2,4} (2015) ⁵	Endangered
Western Hudson Bay (WHB)	31,120 (1987) ⁵	54,500 ^{5,6,7,9}	Special concern
James Bay	6,600 + (1853) ⁸	10,600 ⁴	N/A
Ungava Bay	400-500 (1962) ³	32 ³ (95% CI = 0 to 94)	Endangered

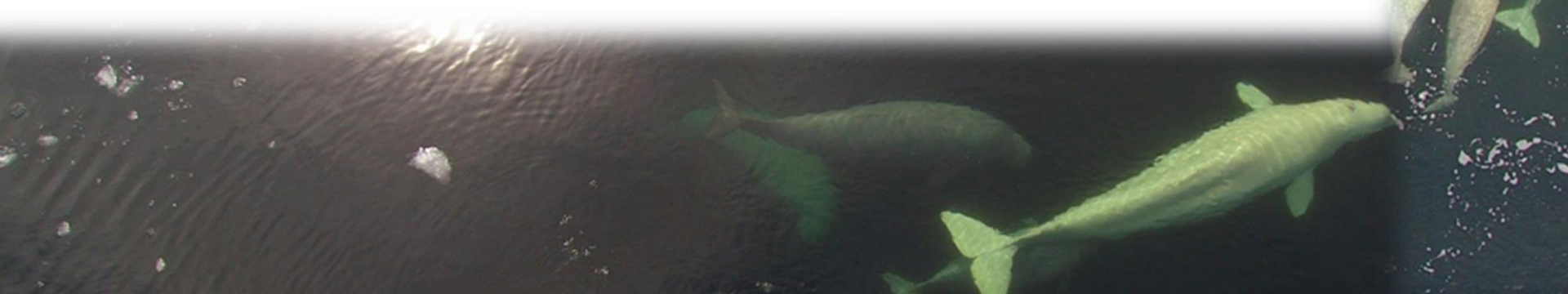
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4. New Ungava Beluga information

1. IK study



2. Ungava/Mucalic Beluga Inuit Knowledge study

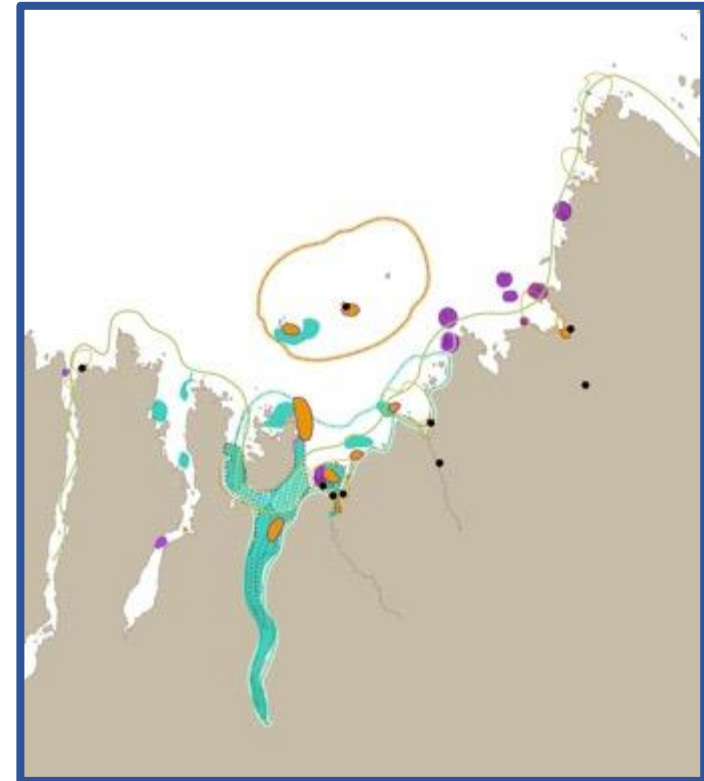
PURPOSE OF STUDY

- Document Inuit Knowledge of beluga in the Southern Ungava Bay & perspectives on management
- Inform the upcoming NMRWB beluga management decisions
 - especially regarding the area that has been closed since the 1980s



2. Ungava/Mucalic Beluga Inuit Knowledge study

Interviews in Kuujjuaq, Kangiqsualujjuaq and Tasiujaq
32 participants in total, aged 31 to 90 (average age 62 years)



2. Ungava/Mucalic Beluga Inuit Knowledge study

- Decreased use of South Ungava by beluga in late 1970s and early 1980s
 - Increases in noise from outboard motors and shipping
 - changes in harvesting (chasing instead of waiting)
- Very little indication of the hunting closure having a positive effect on Beluga population
- Desire for the area to be opened – but very cautious about it
 - Locally managed, limited hunt



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1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

Management and Conservation

1. Historic Subsistence Harvesting
2. Commercial Whaling
3. Federal Management
4. Co-Management
 1. Joint Zones
 2. Percentage system
 3. Pilot Projects
5. Harvest numbers
6. The future



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
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1. Historic Subsistence Harvesting

- Beluga have always been harvested by Nunavik Inuit
- Operated with no risk to beluga populations
- “Management” and “Conservation” were integrated, as apposed to regulated
- Sustainable Harvest through **Inuit Qaujimajatuqangit**
 - Only take what is needed
 - Avoid harvesting the migration leaders
 - And more...



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1. Public Hearing Information
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1. Historic Subsistence Harvesting

- What has changed in Modern times?
 - Inuit population – has gone up
 - Beluga populations – have decreased (why? Coming up)
- Modern Technology can change hunting
 - Firearms
 - Outboards
 - GPS



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1. Public Hearing Information
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1. Historic Subsistence Harvesting

- Many things have changed since back then
- Inuit Qaujimagatuqangit also changes with time

- What can we learn from the past?
- What needs to change in a modern world?



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1. Public Hearing Information
2. Research and Knowledge
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2. Commercial Whaling

- Occurred in several areas in Nunavik in the 1800s and early 1900s
 - Ungava Bay, East Hudson Bay
 - Largely through the Hudson Bay Company
 - MUCH higher harvest levels
 - at least 1,340 in Ungava Bay (1860s-1900s)
 - Estimated 7,875 in eastern Hudson Bay (1854-63)
- (Information from DFO, 2013)



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1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

2. Commercial Whaling

- Accepted Theory / Knowledge:
 - Commercial whaling caused the declines in beluga stock
 - This is the reason for **Historic Decline**
 - East Hudson bay stock:
12,500 down to **3,000** (Doniol-Valcroze et al. 2011)



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1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

2. Commercial Whaling

Another theory:

- Some stocks (EHB, UB) have never recovered
 - These Stocks are considered endangered by Government
- Why have the stocks not recovered?
 - **We don't know for sure**
 - Climate change?
 - Increased noise pollution?
 - Subsistence harvest?
 - Countless other possibilities



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

3. Federal Management

- Primarily from the 1980s to Early 2000s
- East Hudson Bay and Ungava Bay beluga stocks:
 - Designated as endangered
- Federal Management and Conservation measures:
 - Estuary Closures
 - Quota system
 - Directing hunting towards Hudson Strait
 - (less chance of harvesting endangered whales)



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

3. Federal Management

Successes

- Stock populations appear to have stayed stable
- Hunting not completely closed
- Scientific information has increased



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

3. Federal Management

Challenges

- Inuit opposition to some of the restrictions
- Before Land Claim
 - Primarily Science-based
 - Inuit Knowledge not given the same weight
 - Inuit Harvesting rights not yet formal in offshore areas



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1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

4. Co-Management

2000s to Present

- The NMRWB is the main decision-making body
- Created under the land claim agreement
- Considers Inuit Knowledge alongside Science



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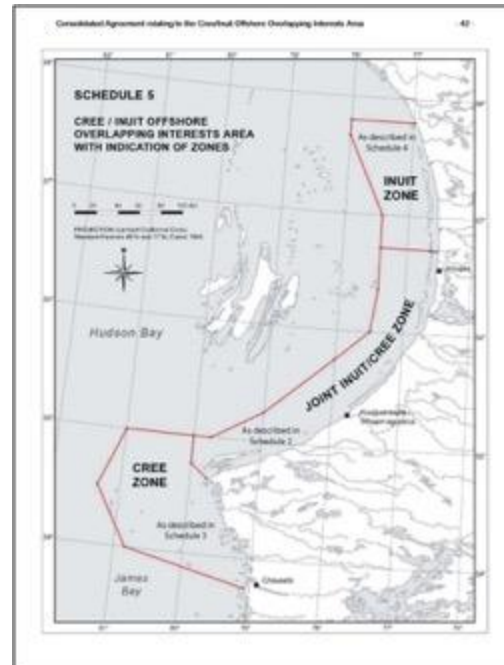


1. Public Hearing Information
2. Research and Knowledge
3. Management and Conservation

4. Co-Management

Changes under co-management:

- Decision-making must have input from all rights holders



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1. Public Hearing Information
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4. Co-Management

Changes under co-management:

- Flexible Quota system (percentage system)

Pros:

- Allowed harvesting at any time of year, anywhere in the NMR
- Allowed Anguvigaq to decide community allocations

Cons:

- Difficult to understand and manage for hunters
- Small mistakes to cause big issues
- Geographical issues
 - ie hunting in one area affects community quotas in another



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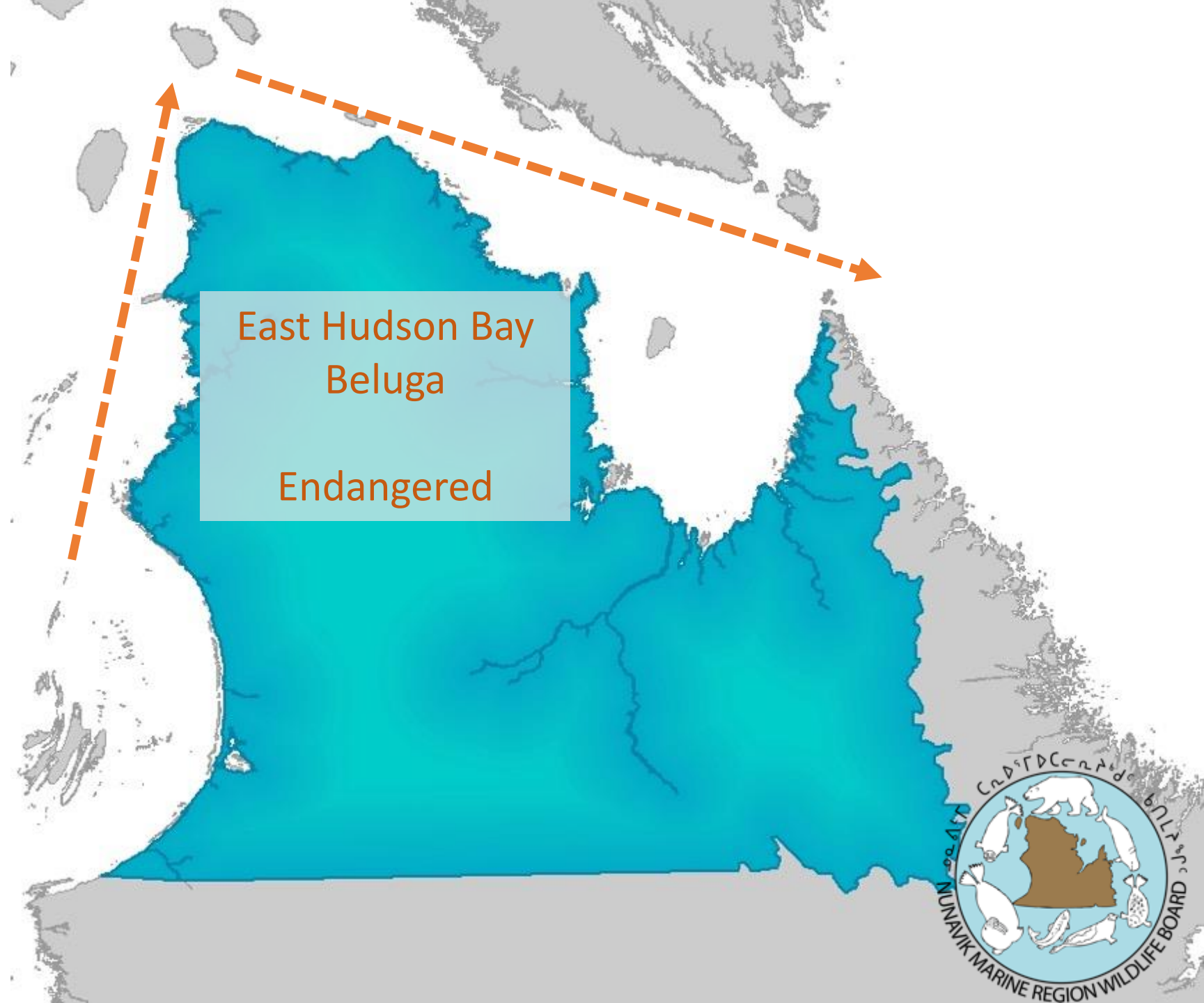
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4. Co-Management

Changes under co-management:

- Inuit Knowledge Based Pilot Projects
 - 2 examples
 - Kuujjuaraapik
 - Hudson Strait
- Local Knowledge indicates that hunters can avoid EHB, and focus hunting on healthy groups of beluga





East Hudson Bay
Beluga
Endangered

The image shows a map of the East Hudson Bay region in northern Canada. The water area is shaded in a gradient of blue and cyan. A semi-transparent grey box is centered over the bay, containing the text "East Hudson Bay", "Beluga", and "Endangered" in orange. A dashed orange line with arrowheads at both ends forms a large, irregular shape encompassing the bay and extending towards the north and east. In the bottom right corner, there is a circular logo for the Nunavut Marine Region Wildlife Board, featuring a polar bear, a walrus, and fish, with the board's name in Inuktitut and English.





West Hudson Bay
Beluga
Not Endangered



The Hudson Strait Pilot Project



WHB
Not Endangered

Hunter Knowledge:
Pass by Later in November

EHB
Endangered

Hunter Knowledge:
Usually Migrate Early November



The Hudson Strait Pilot Project

"EHB"
"short whales"
Endangered

Avoid Hunting



The Hudson Strait Pilot Project



“WHB”
“long whales”
Not Endangered

“EHB”
“short whales”
Endangered

Hunt and Sample

Avoid Hunting

- Hunt whales after the Short Beluga (EHB) have passed, and sample
- Sample is sent for stock identification
- If EHB are successfully avoided, the used quota is returned.



2 years of Hudson Strait Pilot Project

- Total beluga sampled: **43**
(from Salluit)
- Number of EHB: **7**
- Expected: **10-11**
- **3-4 Less EHB harvested than expected**
- **Over 2 years extra allocation in Hudson Strait:**
 - **15 in Fall or 37 in spring/summer**

4. Nunavik Beluga Working Group Suggestions

1. Status Quo

- Keep with the current system

2. Tweaks and improvements

- New pilot projects, consideration of closed areas, etc.

3. Major/Fundamental changes

- Separating regional beluga hunting areas

4. No Quota

- Management based entirely on Non-Quota limits and Inuit Knowledge

NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
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5. Harvest numbers

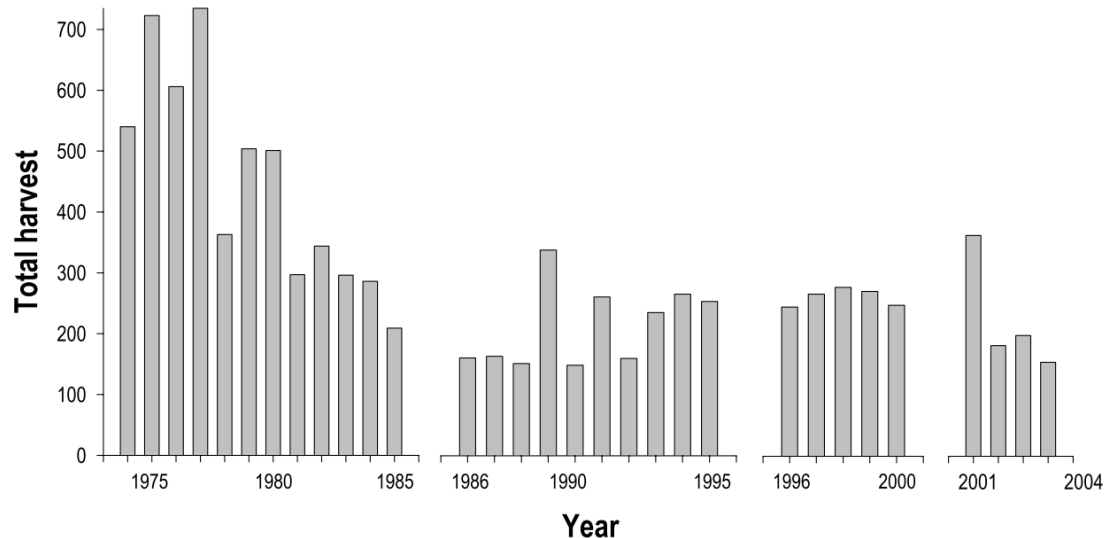


Figure 2. Total number of beluga harvested by the Nunavik communities between 1974 and 2004. Data were compiled by the Native Harvesting Research Committee (1974–1980: used 'Estimate total harvest' from Native Harvesting Research Committee 1976; 1979; 1982a; 1982b), by Anguvigaq Wildlife Management Inc. and the Department of Fisheries and Oceans (1981–1985: Brooke and Kemp 1986), the Department of Fisheries and Oceans, and depending on years, Anguvigaq, Makivik or Kativik Regional Government (1986–1990: Richard 1993), and community agents and the Department of Fisheries and Oceans (1991–2004: Brooke 1992; 1995; 1996; 1997; 1998; Olpinski (1993); Portnoff (1994) for years 1991–1997, and R. Fibich or D. Baillargeon, Coordinators, Northern Quebec Affairs for years 1998–2004).

Source: DFO 2019

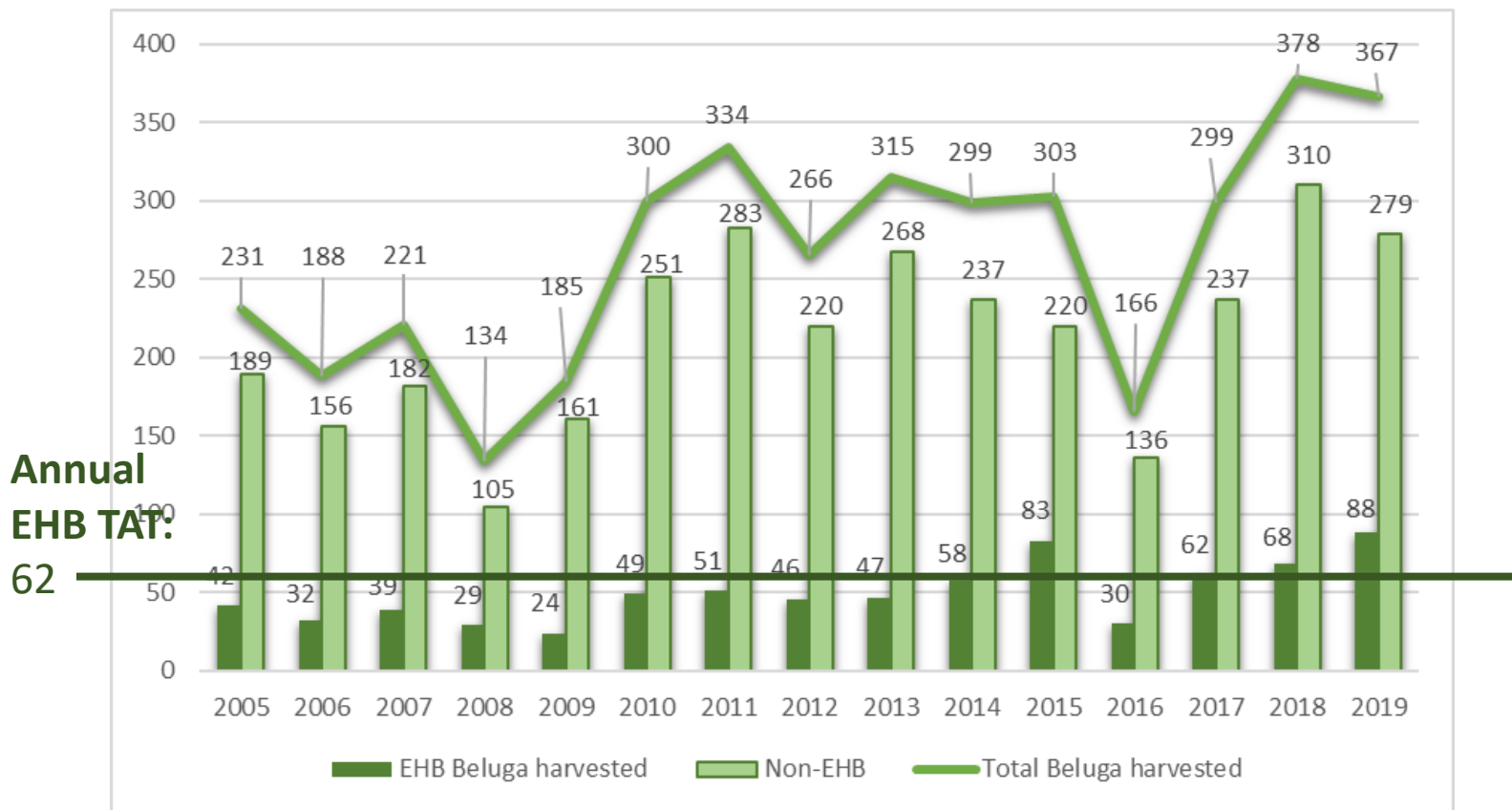


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1. Public Hearing Information
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5. Harvest numbers



Source: DFO 2019



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6. The Future

- Pilot projects:
 - Continued efforts to bring Inuit Knowledge into management
 - Need ways that Local Knowledge can be used to avoid endangered stocks
- Efforts to take pressure off the EHB stock, with as little impact to Inuit Harvesting as possible



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
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6. The Future

- NMRWB: Continue to assess older Federal regulations
 - The NMRWB "Inherited" Federal regulations when it was formed
 - Some of these regulations may need re-assessment under the land claim
 - ie: closed estuaries
- Continue to ensure regulations are consistent with the land claim



NMRWB/EMRWB Beluga Public Hearing



1. Public Hearing Information
2. Research and Knowledge
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6. The Future

- This Public Hearing
- Will inform new decisions in the near future
- Will allow the NMRWB and EMRWB to make the best decisions possible.

