

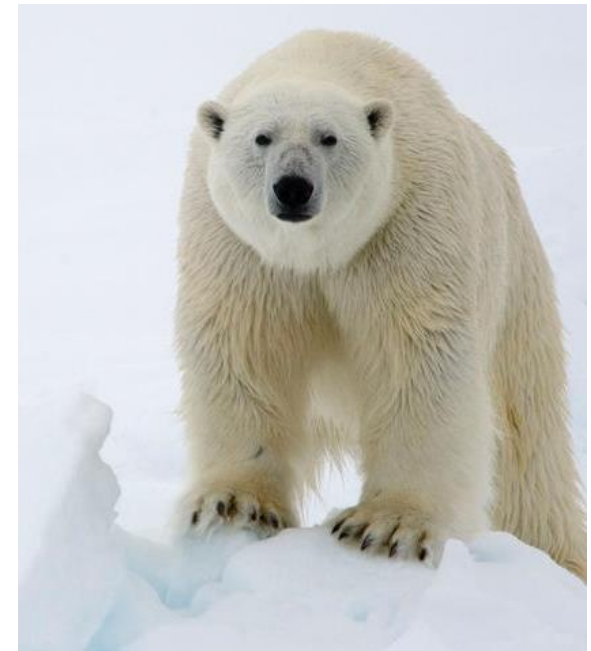
Canada's Approach to Marine Conservation



Bethany Schroeder
Fisheries and Oceans Canada
Central and Arctic Region



1. Canada's marine commitments
2. MCT plan forward
3. MPA Network
4. OEABCM Examples





The Importance of Marine Conservation

- MPAs maintain biodiversity, represent ecosystems, protect important habitats, provide a refuge for species, and restore ecosystem resilience in a changing climate (oceans absorb 90% of excess heat and 25% of carbon produced by humans).
- Oceans are an important economic driver, contributing 346,000 jobs and \$36 billion to Canada's Gross Domestic Product.
- Effectively managed MPAs contribute to long-term sustainability of activities dependent on living resources.
- **Link between management, monitoring and governance**



Canada's Commitments

- **In 2010, Canada agreed to a marine conservation target under the United Nations Convention on Biological Diversity (Aichi Target 11):**
 - *By 2020, at least 17% of terrestrial and inland water, and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.*
- **The targets apply to Canada – not to an ocean or on a bioregional basis and are likely to increase past 2020.**
- **The commitment to meet the Aichi Target 11 was reconfirmed:**
 - In 2015: National biodiversity goal: 10% marine conservation by 2020.
 - In 2015: United Nations General Assembly's 2030 Agenda for Sustainable Development under Goal 14 .
 - In 2016: Canada-U.S. Joint Statement on Climate, Energy, and Arctic Leadership, to meet the 10% target by 2020.



Minister's Mandate Letter

- Work with the Minister of Environment and Climate Change to increase the proportion of Canada's marine and coastal areas that are protected to 5% by 2017 and to 10% by 2020.
 - ... supported by new investments in community consultation and science.
- Work with the provinces, territories, Indigenous Peoples, and other stakeholders to better co-manage our three oceans.
- Use scientific evidence and the precautionary principle, and take into account climate change, when making decisions affecting fish stocks and ecosystem management.

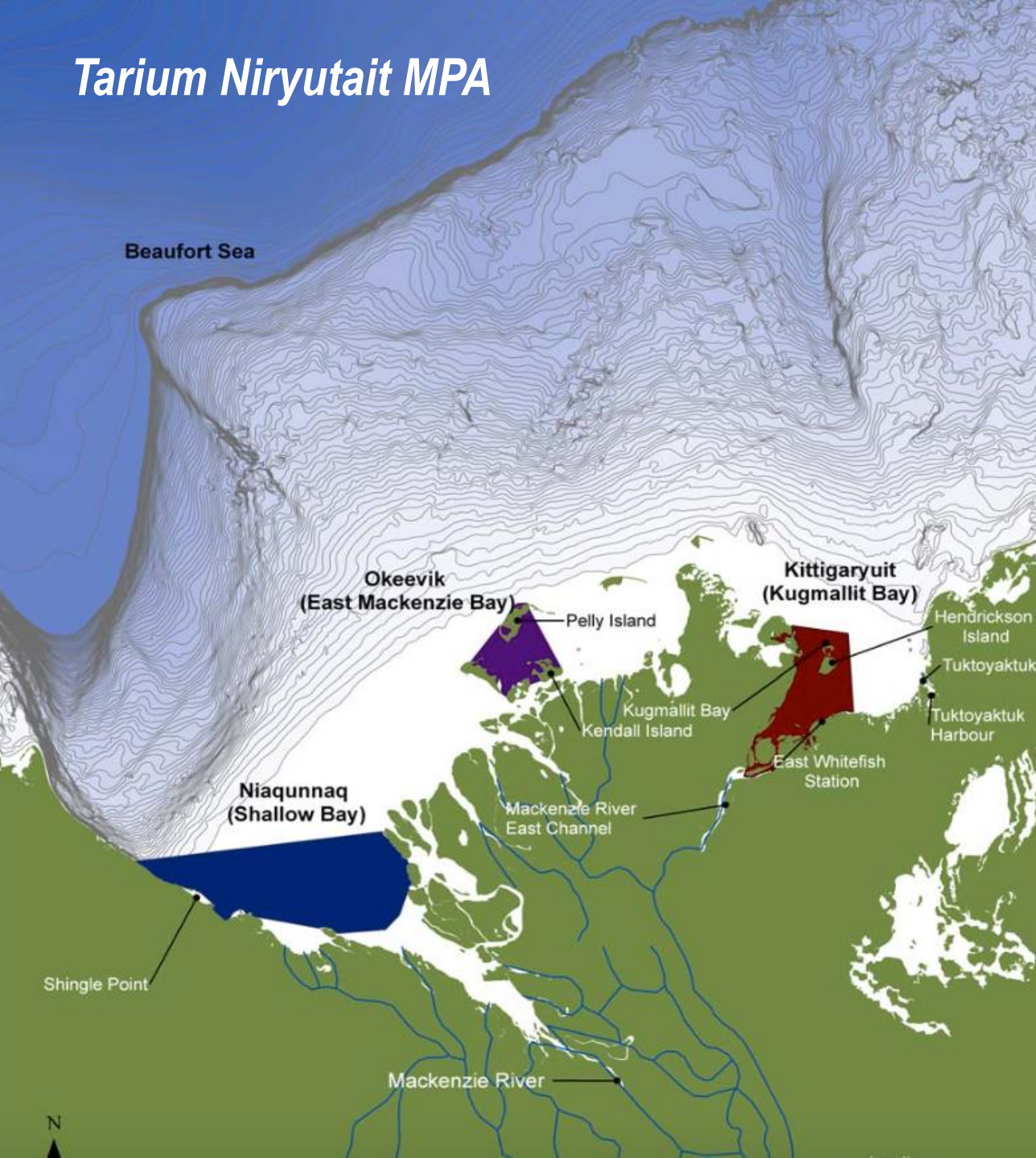


Current Marine and Coastal Protection

- Efforts undertaken to date include:
 - ✓ Establishing and advancing new MPAs
 - ✓ Developing a Network of MPAs
 - ✓ Establishing Fisheries Closures
 - ✓ Identification of ecologically and biologically significant areas (EBSAs)
 - ✓ 2011 National Framework for Canada's Network of MPAs
 - ✓ 2005 Federal MPA Strategy
 - ✓ Guidance for MPA practitioners
 - ✓ Creating a Sensitive Benthic Areas Policy
 - ✓ Scientific guidance on other effective areas based conservation measures
- Canada has conserved approximately 50,000 km² or just under 1% of our coastal and marine environment.

Current Status <i>(percentages have not been adjusted to reflect areas where two jurisdictions cooperate)</i>		
Parks Canada Agency	0.22%	<ul style="list-style-type: none"> ○ 2 existing NMCAs ○ Marine portions of National Parks
Environment & Climate Change	0.34%	<ul style="list-style-type: none"> ○ Marine portions of NWA's & MBSs
Fisheries & Oceans	0.18%	<ul style="list-style-type: none"> ○ 8 <i>Oceans Act</i> MPAs
Provinces	0.18%	<ul style="list-style-type: none"> ○ Marine parks ○ Estuary protected areas ○ Marine portions of parks and ecological reserves, etc.

Tarium Niryutait MPA



To conserve and protect beluga whales and other marine species, their habitats, and their supporting ecosystems

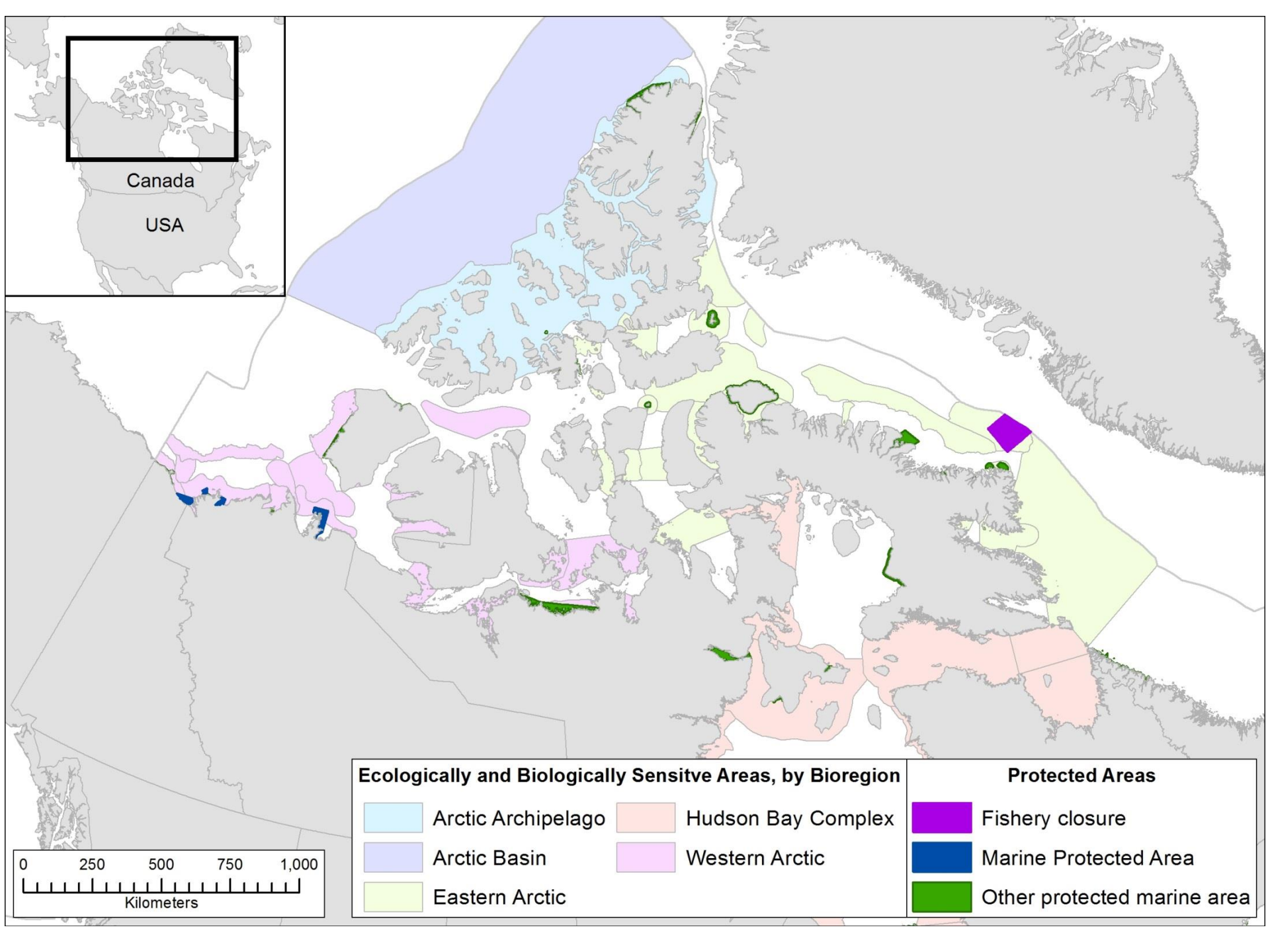


Co-management partnership and monitoring



- Beluga whales remain central to Inuvialuit culture and way of life
- Nearly 40 years of harvest monitoring data
- As co-managers, actively participate in research, monitoring and decision-making







Remaining Gaps

- Canada ranked 77 out of 150 countries in a 2013 international comparison of marine protection.
- The 10% target is ambitious and amounts to 575,000 km² (approximately the area of all Atlantic provinces combined).
- Leaves gap of 237,500 km² to protect by 2017, and a further 287,500 km² by 2020.
- MCT work will focus efforts on this gap.



MCT Plan

1. **Finish What Was Started:**

- Proposed Lancaster Sound NMCA (expanded area)
- Proposed *Oceans Act* MPAs:
 - Anguniaqvia niqiqyuam, Inuvialuit Settlement Region (NWT)
 - Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs, BC
 - Laurentian Channel, NL
 - St. Anns Bank, NS
 - Banc des Américains, QC



Anguniaqvia niqiqyuam MPA





MCT Plan

2. Protect Pristine Areas:

- Establish new, large *Oceans Act* MPAs in pristine offshore areas.
 - Allows use of precautionary approach while science, socio-economic analysis, and cultural considerations continue to develop and inform MPA management.
 - Consistent with United States, Australia, United Kingdom and New Zealand
- The location, management approaches, and size of these areas will be determined in consultation with our partners, Indigenous groups, and stakeholders.



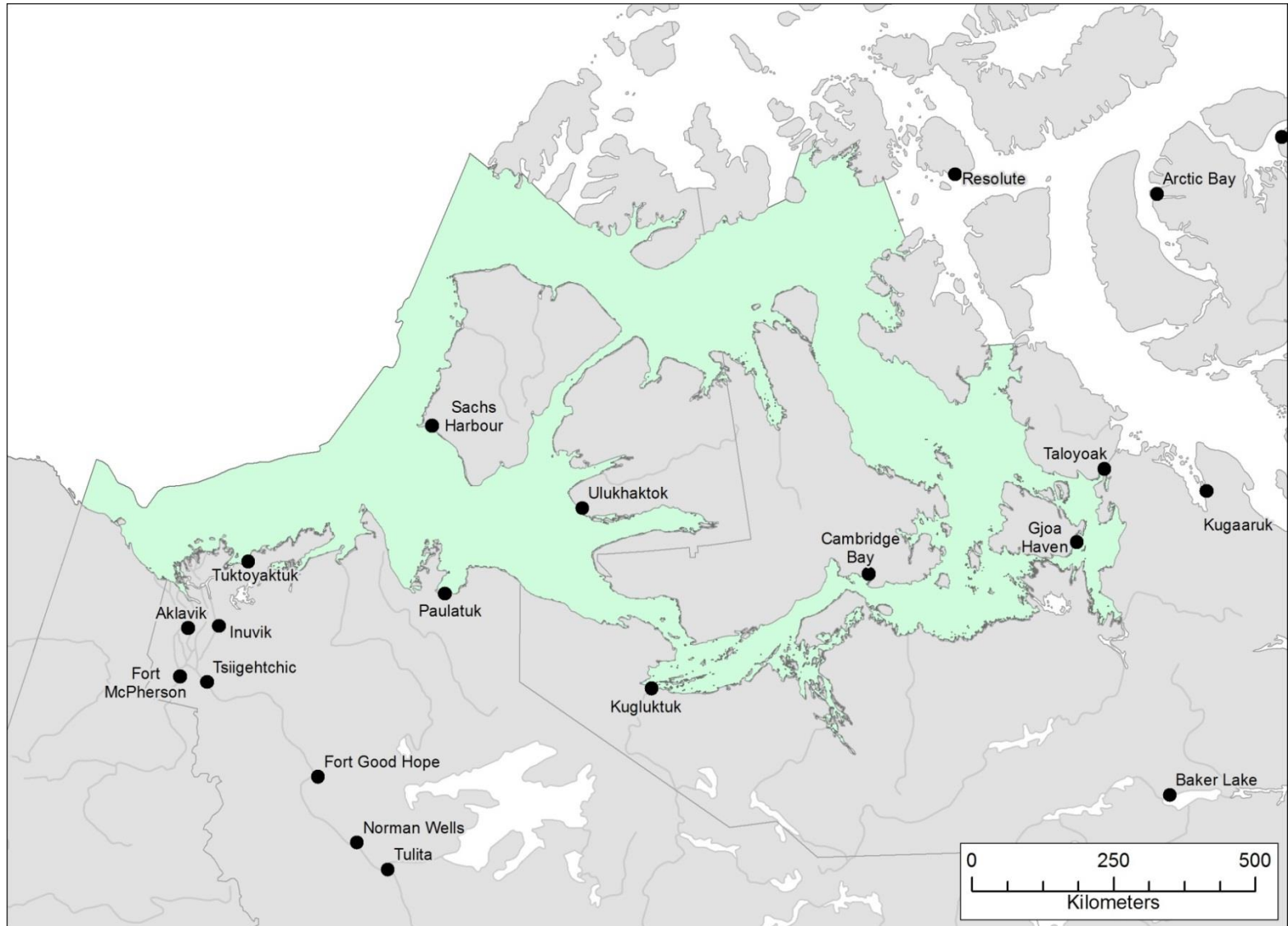
MCT Plan

3. Protect Areas Under Pressure:

- Establish additional *Oceans Act* MPAs in areas under pressure from human activities:
 - Further advance MPA network development in priority bioregions and in other areas;
 - Identify other areas to move towards designation.
- The location, management approaches, and size of these areas will be determined in consultation with provinces, territories, Indigenous groups, and stakeholders.

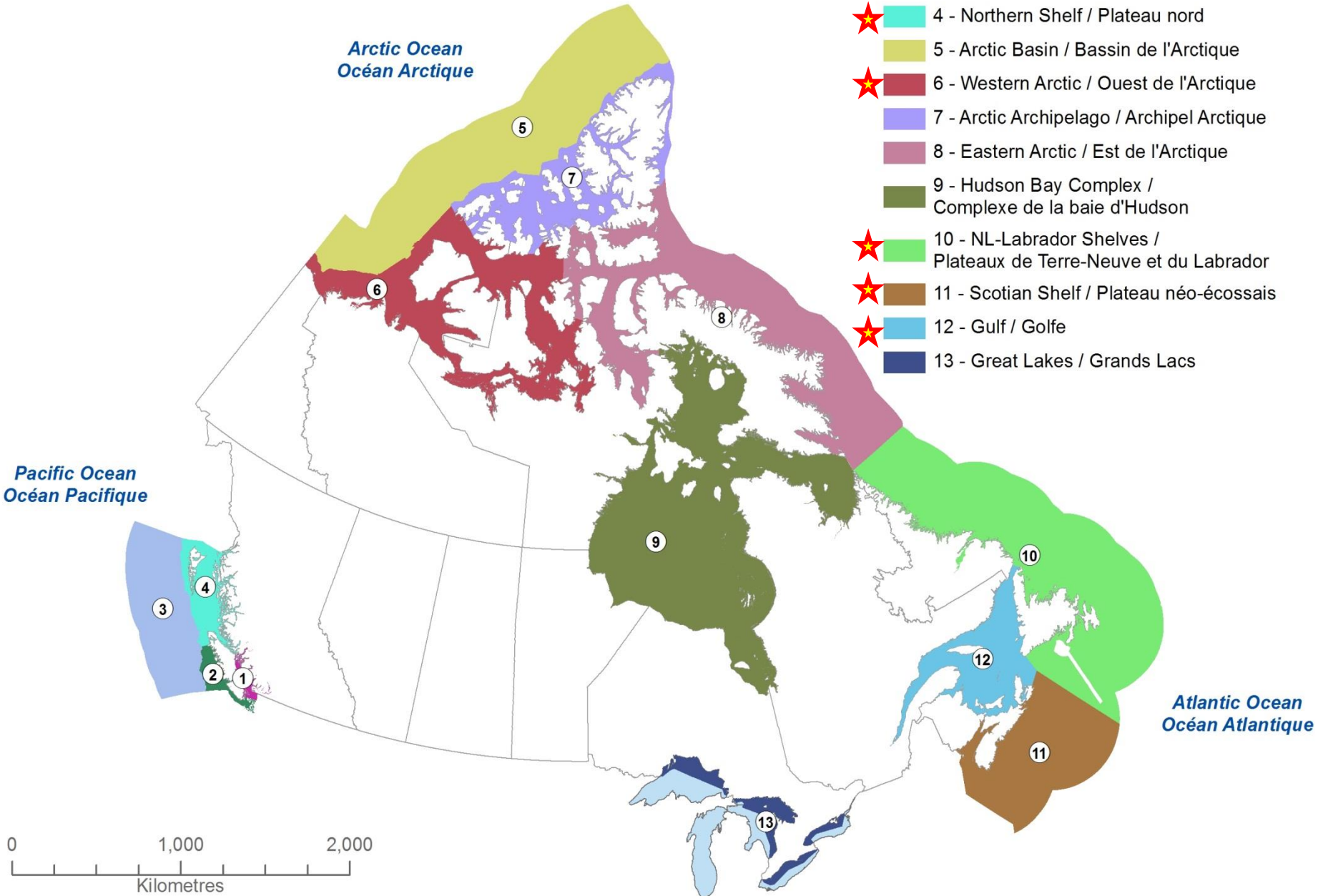


MPA Network: Western Arctic Bioregion



Canada's Bioregions / Biorégions du Canada

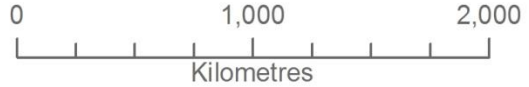
- 1 - Strait of Georgia / Détroit de Georgia
- 2 - Southern Shelf / Plateau sud
- 3 - Offshore Pacific / Zone du large du Pacifique
- 4 - Northern Shelf / Plateau nord
- 5 - Arctic Basin / Bassin de l'Arctique
- 6 - Western Arctic / Ouest de l'Arctique
- 7 - Arctic Archipelago / Archipel Arctique
- 8 - Eastern Arctic / Est de l'Arctique
- 9 - Hudson Bay Complex / Complexe de la baie d'Hudson
- 10 - NL-Labrador Shelves / Plateaux de Terre-Neuve et du Labrador
- 11 - Scotian Shelf / Plateau néo-écossais
- 12 - Gulf / Golfe
- 13 - Great Lakes / Grands Lacs



Arctic Ocean
Océan Arctique

Pacific Ocean
Océan Pacifique

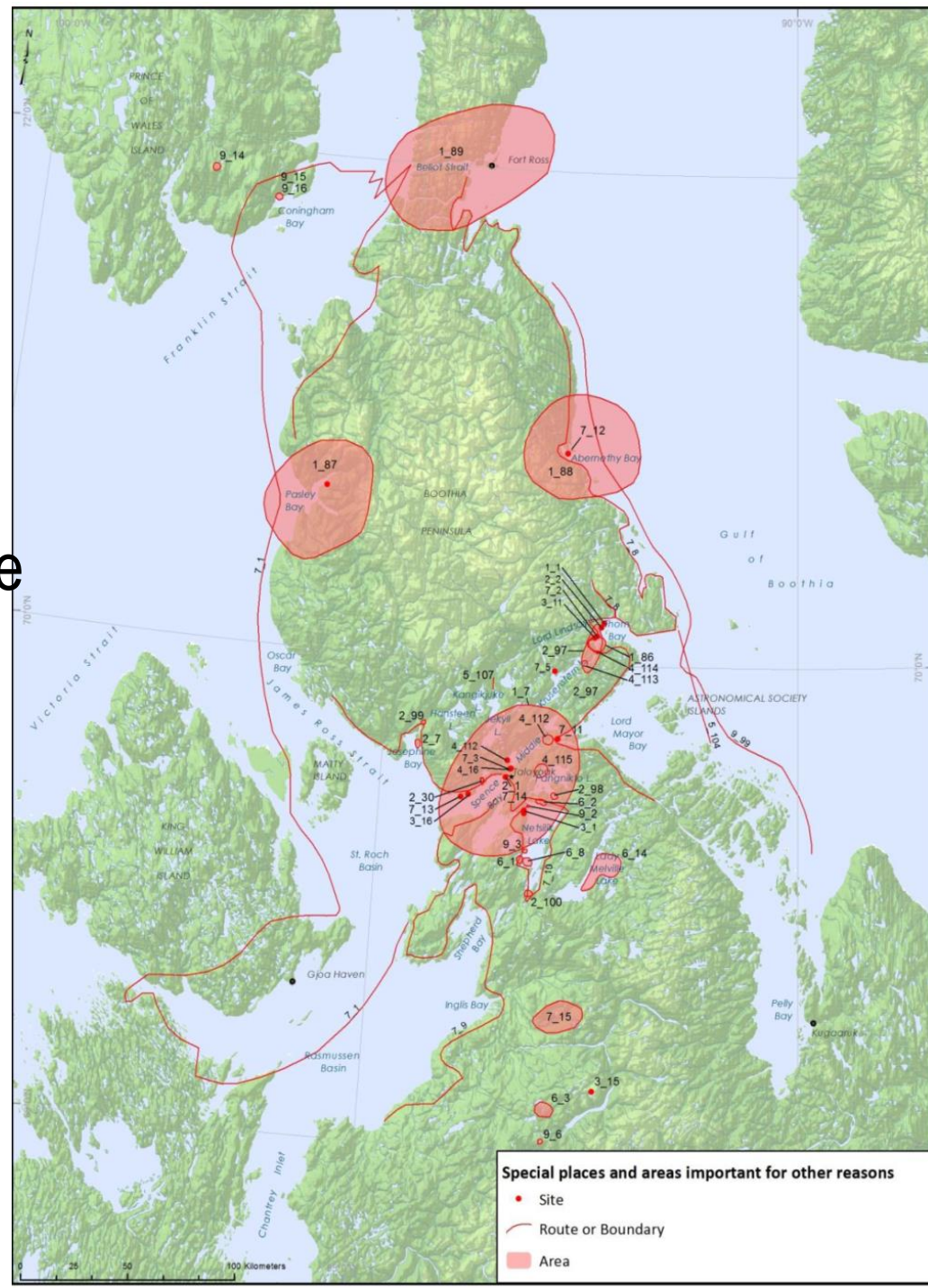
Atlantic Ocean
Océan Atlantique





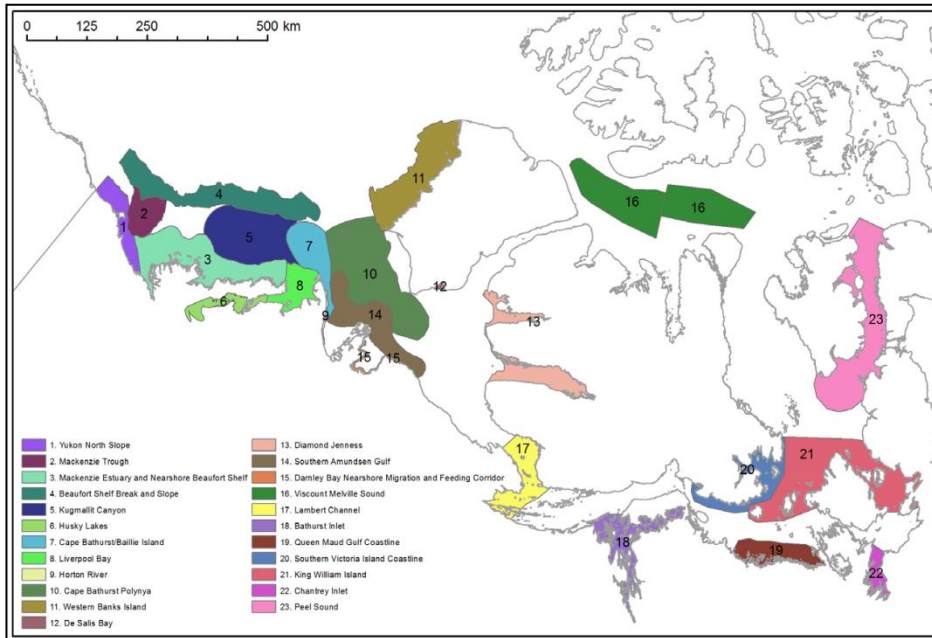
Indigenous Knowledge

- TK previously shared
- Community Conservation Plans
- Nunavut Coastal Resource Inventory reports
- Community consultations and discussions
- Community Liaison WG
- Reporting back to Org's

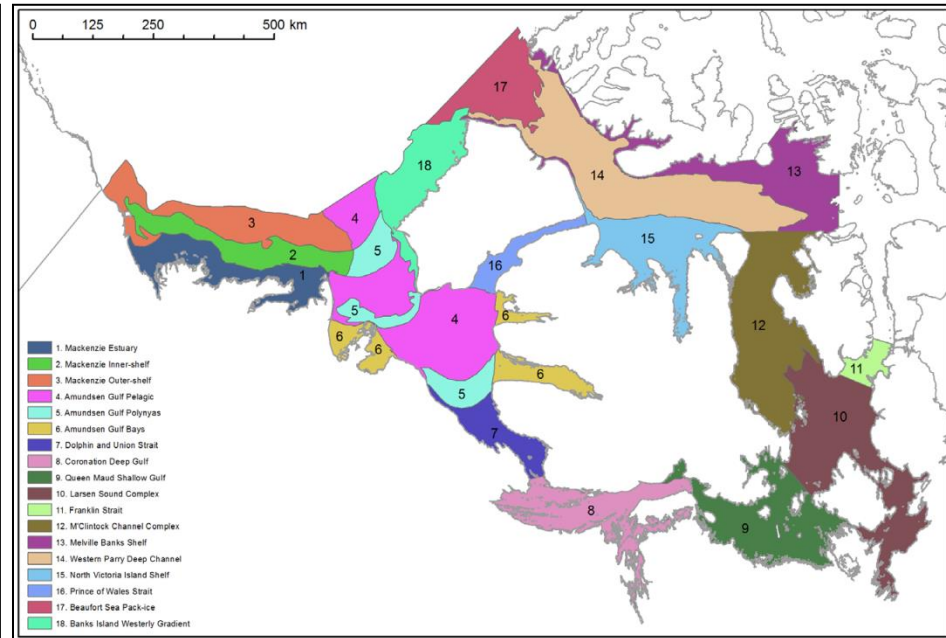




Priority Conservation Areas



EBSA's (refined)

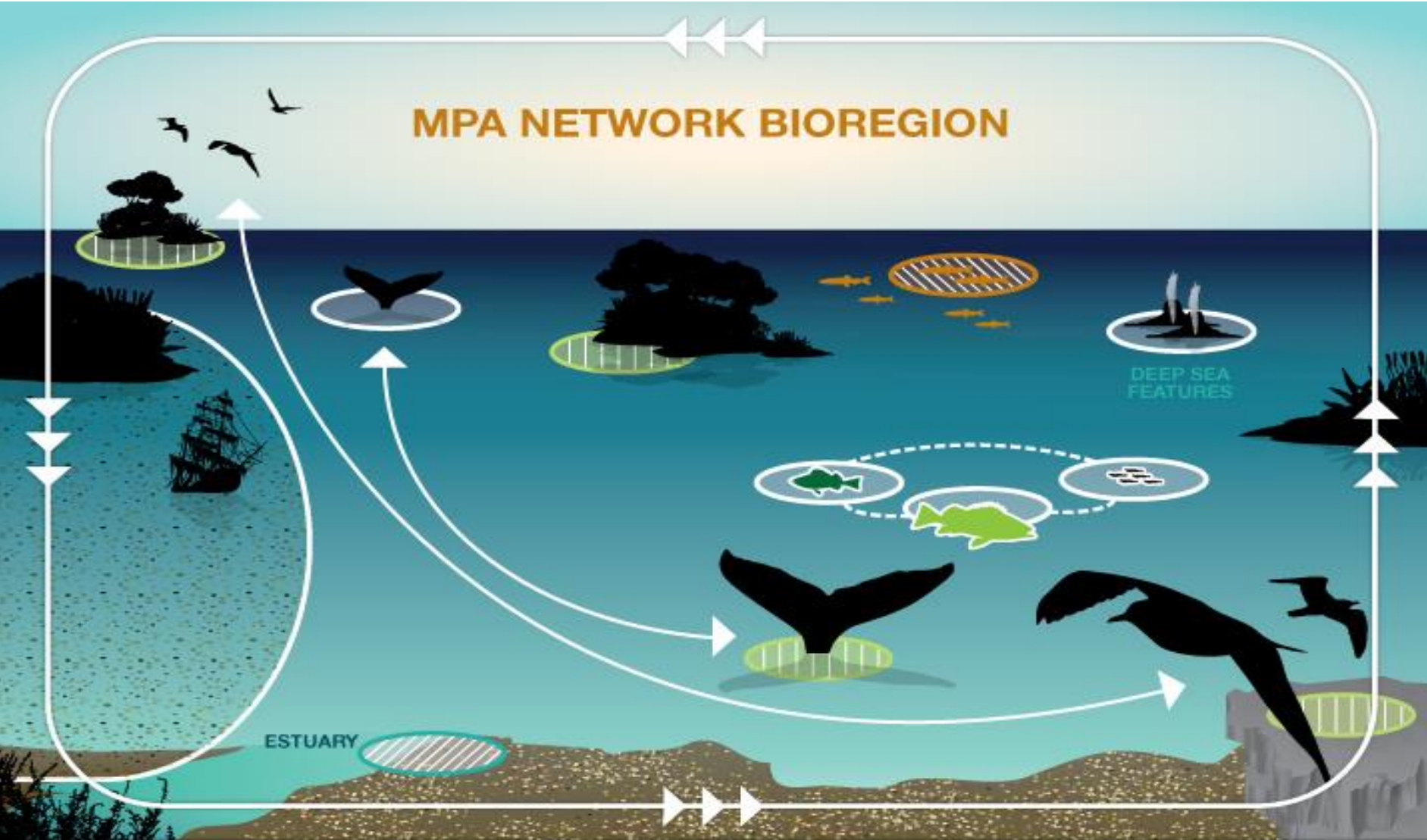


Eco-units (habitat representativity)

- ESS-CP's being identified and peer reviewed at CSAS process (Nov 2016)
- Ongoing data accumulation, synthesis, exploration



MPA NETWORK BIOREGION



- EC National Wildlife Area, Marine Wildlife Area, Migratory Bird Sanctuary
- DFO Fisheries Closure
- DFO Marine Protected Area
- PC National Marine Conservation Area
- Provincial Ecological Reserve



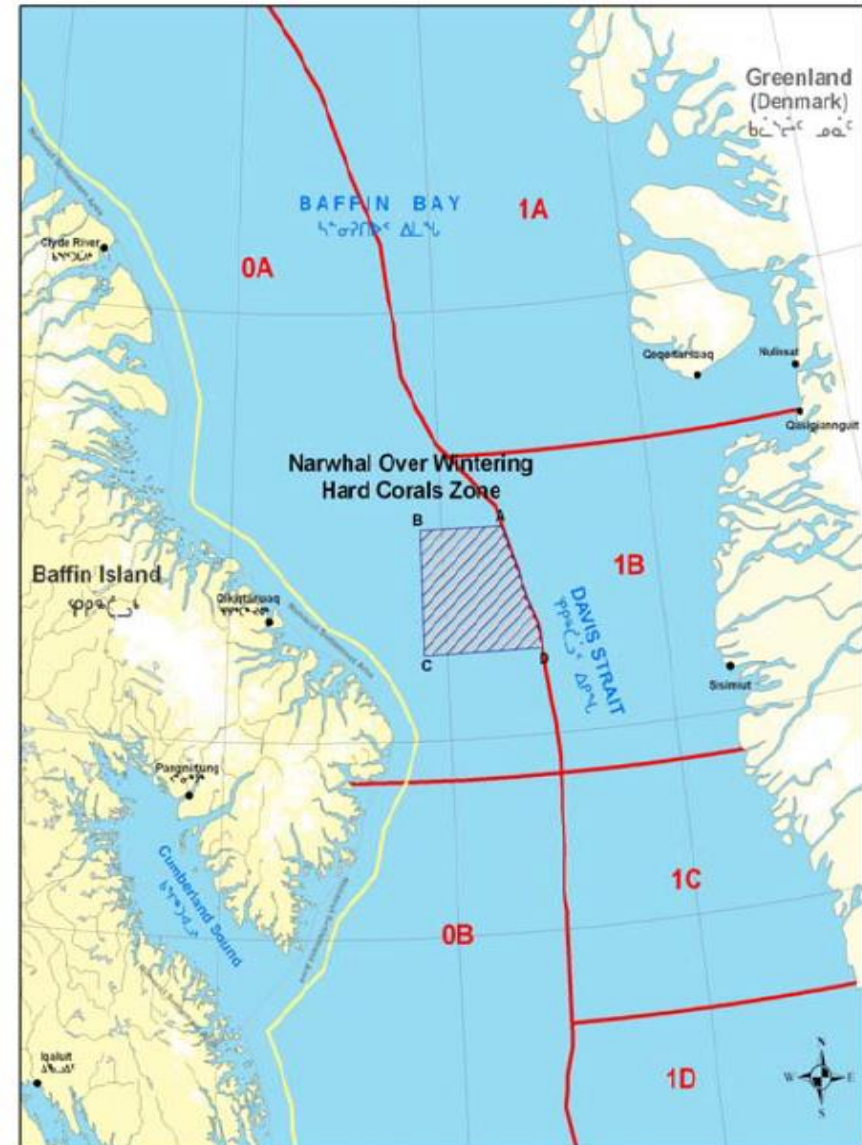
OEABCM DFO Criteria - proposed

- Inventory of all existing measures with spatial component
 - Fisheries closures, SARA CH, IFMP regulations, gear restrictions, C&P closures, management measures etc.
- All OEABCM must meet:
 1. Clearly defined geographic location
 2. Presence of ecological components of interest
 3. Conservation or stock management objective(s)
 4. Long term duration of implementation
 5. Ecological components of interest are conserved
- Exclusions/restrictions already identified
- Complementary to IUCN guidance



Fishery closure - existing

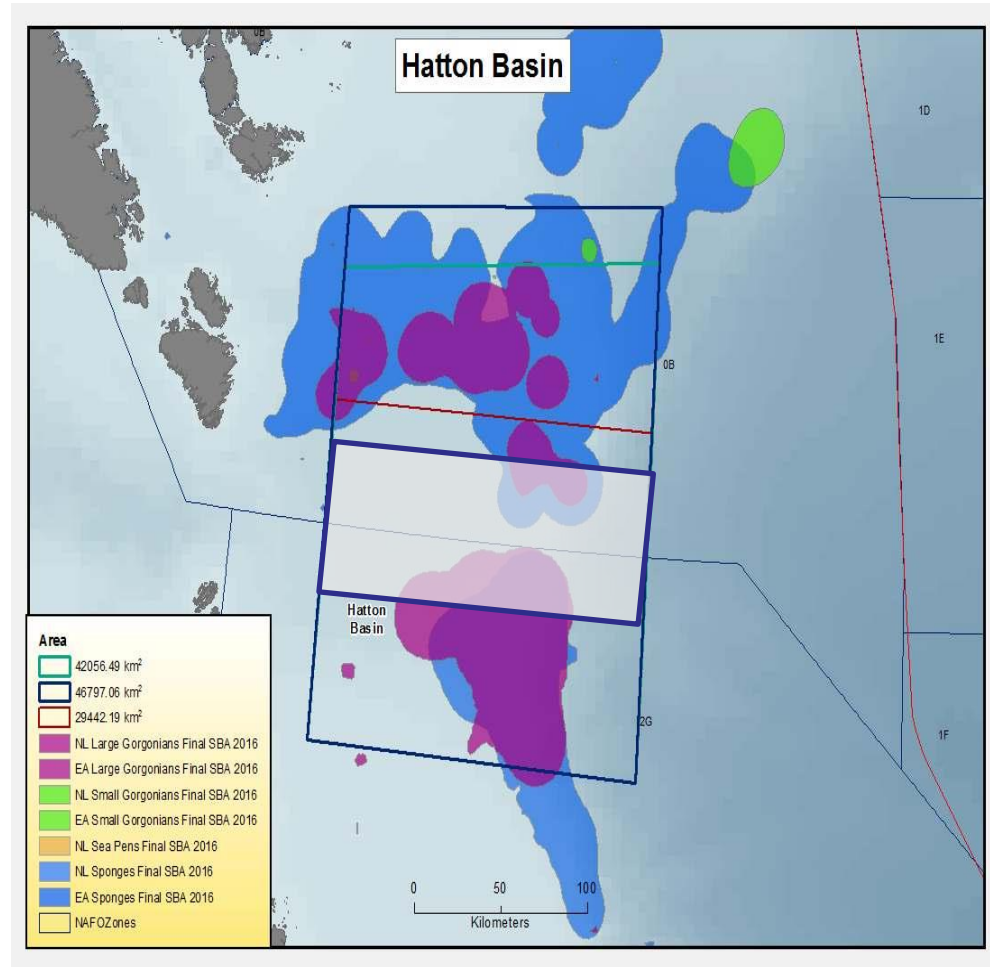
- Davis Strait, NU
 - NAFO 0A
 - Not within NSA
- Narwhal overwintering/
coldwater corals
- Legislated closure
 - Gear restriction (GLH)
 - Shrimp fishery allowed





Fishery closure - voluntary

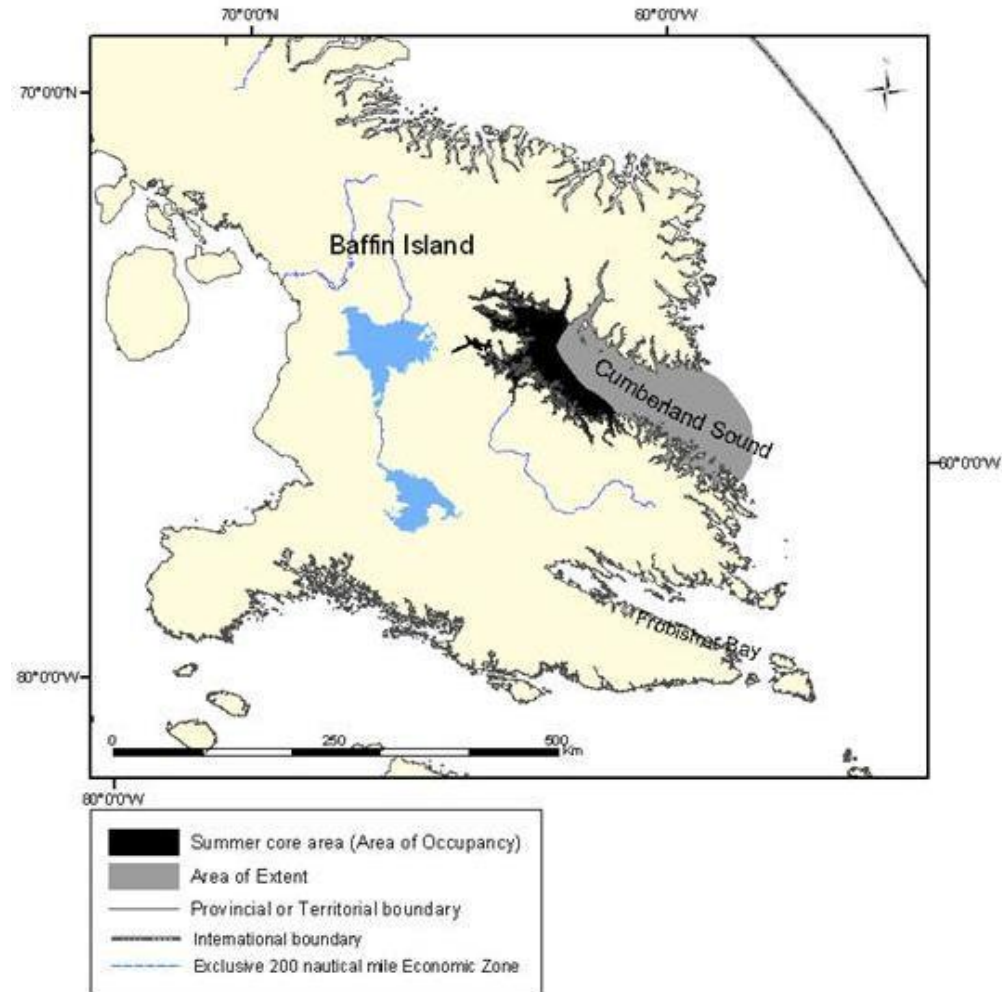
- Hatton Basin, NU
 - NAFO 0B2G
 - Not within NSA
- Sensitive benthic area
- Voluntary area
 - Pursuing expanded area
 - Gear restriction (benthic)





SARA Critical Habitat – Cumberland Sound Beluga

- Overexploitation, habitat destruction, environmental degradation/predation
- COSEWIC: Threatened
- Proposed for listing
 - Critical habitat identified
 - OEABCM criteria could be applied





Summary

- Essential to have support and engagement with co-management partners at the outset
- Enhanced communication of science advice to managers and policy makers
 - Address cross-sectoral/departmental communication
- Targets = reporting benchmarks, biodiversity is key
- Adaptive management
 - State of the MPA Report (5 yr assessment)
 - MPA Networks to be updated with new data

Bethany.Schroeder@dfo-mpo.gc.ca

Fisheries and Oceans Canada, Central and Arctic

<http://www.dfo-mpo.gc.ca/oceans/conservation/index-eng.html>

