Report from the inaugural

East Hudson Bay/James Bay Regional Roundtable

Chisasibi, QC
November 7th-9th, 2016

An initiative towards a Hudson Bay Consortium

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MEETING SPONSORS

This meeting was organized by the Arctic Eider Society with support and funding from the Cree Nation of Chisasibi, Tides Canada, ArcticNet, and Oceans North.

BACKGROUND

The inaugural East Hudson Bay/James Bay Regional Roundtable meeting was held in Chisasibi, Nov. 7th-9th, 2016 with a goal of bringing together Inuit and Cree communities and stakeholders to share knowledge and coordinate on priorities for marine stewardship, ongoing and planned research, protected areas planning and communications. This eastern roundtable is intended to parallel existing regional efforts on the western side of Hudson Bay, with a focus on the overlapping Nunavut, Nunavik, and Eeyou Marine Regions in east Hudson Bay/James Bay and Mushkegowuk region of west James Bay. The East Hudson Bay/James Bay Regional Roundtable is intended to be an ongoing forum to foster communications, collaboration, and environmental stewardship among jurisdictions, and to discuss local priorities as a part of a step-wise regional approach to forming a Hudson Bay Consortium. The November 2016 meeting in Chisasibi was specifically intended to kick-start regional planning and consultation on priorities and a shared vision for environmental stewardship through a Hudson Bay Consortium, in advance of a Hudson Bay Summit that will bring together west and eastern groups to formally create the Hudson Bay Consortium. A full list of participants and organizations is available at hudsonbayconsortium.com/chisasibi2016. The following report provides a detailed synopsis of the meeting and workshop outcomes. Further details including presentation slides and video transcripts from the meeting are also available online.

REGISTERED ORGANIZATIONS

Anguvigaq of Umiujaq
Anniturvik Landholding Corporation of Umiujaq
Arctic Eider Society
Arctic Institute of North America
ArcticNet
Canadian Parks and Wilderness Society
Centre for Earth Observation Science, University of Manitoba
Centre for Northern Studies (CEN)
Chisasibi Eeyou Resource and Research institute
Concordia University
Cree Nation of Chisasibi
Cree Nation of Eastmain
Cree Nation Government
Cree Nation of Wemindji
Cree Trappers Association
Ducks Unlimited Canada
Eeyou Marine Region
Eeyou Marine Region Wildlife Board
Environment & Climate Change Canada
Fisheries and Oceans Canada
Government of Nunavut
Hutchinson Environmental Sciences Ltd.
Inuit Tapiriit Kanatami
Kativik Regional Government
Kivalliq Inuit Association
LNUK Ivujivik
Makivik Corporation
McGill University
Migratory Birds Habitat Task Force
Mushkegowuk Council
Municipality of Sanikiluaq
Nature Conservancy of Canada
Northern Village of Akulivik
Northern Village of Inukjuaq
Northern Village of Kuujjuaraapik
Northern Village of Umiujaq
Nunavik Marine Region Impact Review Board
Nunavut Impact Review Board
Nunavik Marine Region Planning Commission
Nunavik Marine Region Wildlife Board
Oceans North Canada
Parks Canada
Sanikiluaq Hunters & Trappers Association
Société du Plan Nord
University of Manitoba
University of New Hampshire
University of Toronto
Whapmagoostui First Nation

A complete List of Registered Participants and their organizations is found on page 31.

SUMMARY

General Outcomes & Priorities

A day of introductions, background and presentations by stakeholders on ongoing activities was followed by a day of workshops on important themes and highlight priorities and next steps toward forming a Hudson Bay consortium.

These workshops were:

- Workshop 1: Collaboarative Process for Creating a Hudson Bay Consortium
- Workshop 2: Protected Areas Planning
- Workshop 3: Synthesizing current knowledge & Priorities through ArcticNet Integrated Regional Impact Study (IRIS) for Hudson/James Bays
- Workshop 4: Planning for Coordinated Research Across Regions.

The main outcomes include:

- A common vision statement will be developed to guide formation of the consortium, and made available for community consulation.
- Additional participants will be recruited to the planning steering committee.
- The East Hudson Bay/James Bay Roundtable will be maintained to ensure ample voice for participants and focus on regional issues.
- More work is needed to link east and west James Bay communities and stakeholders.
- Ongoing coordination between this group and the West Hudson Bay Neighbours Regional Roundtable is needed, including a periodic bay-wide forum.
- A community-first approach with respect for Indigenous knowledge.
- Host a follow-up workshop on protected areas.
- Work towards a protected areas strategic plan for the region under the guidance of land claim organizations.
- The ArcticNet IRIS coordinators will follow up with survey respondents on contributions to the Hudson Bay IRIS report and community profiles.
- The secretariat and planning steering committee will continue to seek funding to support the initiative, and work to organize future meetings. Participation from stekeholders is open and encouraged.

Next Steps

- Plan Hudson Bay Summit
- Continue East Hudson Bay/James Bay Roundtable
- Consult with West Hudson Bay Neighbours Regional Roundtable

Addendum

- The West Hudson Bay Neighbours Regional Roundtable has been consulted and would like to collaborate moving forward, including their participation in a Hudson Bay Summit.
- Funding from Polar Kowledge Canada has been secured to support the Hudson Bay Summit in 2018 to bring stakeholders together from across the bays.

DAY 1 SUMMARY

The first day of the roundtable consisted mainly of presentations from the diverse participating groups to introduce their organizations, current projects, and priorities. A background on the history of efforts for environmental stewardship in James/Hudson Bay was also presented, as well as a sysnthesis of knowledge and priorities compiled to date. Wherever possible, PDF versions of the presentations have been made available at www.hudsonbayconsortium.com/chisasibi2106. Comments made during discussions on the first day have been included with the relevant workshop topics later in this report.

Presentations from Key Stakeholders

Nunavut Impact Review Board & Nunavut Marine Council (Elizabeth Copeland & Ryan Barry) – An overview of the boards operating in Nunavut, including the NIRB, Planning Commission, Water Board, and Wildlife Management Board.

Cree Nation Government (Alan Penn) – A history of land claim settlements and implementation, institutions of public government, research and how jurisdictions could work together.

Makivik Corporation (Stas Olpinski) – A history of Makivik and how it has worked to improve living conditions, economic opportunities for Nunavik Inuit, and current research efforts.

Nunavik Marine Region (Mishal Naseer & Tommy Palliser) – The mandates and current activities of the Nunavik Planning Commission, Impact Review Board and Wildlife Board.

Eeyou Marine Region (Issac Masty) – An overview of the region's boards, their mandates, current activities, and research priorities.

Chisasibi Migratory Birds Habitat Taskforce (Roderick Pachano & George Lameboy) – A summary of the taskforce's activities, findings and recommendations regarding eelgrass disappearance.

Chisasibi-Eeyou Resource and Ressearch Institute (Pahren Tangye) – A new institute has been established to work to address research priorities and incorporating Cree knowledge.

Fisheries and Oceans Canada – Protected Areas (Cal Wenghofer) – Canada's marine conservation targets, achievements to date, and the process going forward

Coordinating Existing Knowledge & Priorities

Over the last 20 years, numerous efforts have worked toward addressing environmental change and stewardship in the region. An overview of important publications and documents was given to summarize existing knowledge and priorities for the region.

These documents include:

- *Voices from the Bay* was an initiative that collected traditional ecological knowledge from communities around the bay in response to proposed hydroelectric development (1997).
- Outcomes of the Community Environmental Monitoring Systems workshop series (2007-2008).
- Summary report of the Hudson Bay Bioregion: A State of the Environment as of 1995.
- Assessment of the Potential Environmental Impact of the La Grande River Complex on Hudson Bay and the Inuit Coastal Communities in Northern Quebec (Makivik Corporation and GeoArctic, 2006)
- A Life Vest for Hudson Bay's Drifting Stewardship (NTK, 2009 published in Arctic)
- Parnasimautik Consultation Report (Makivik Corporation, 2013), Nunavik Inuit response to Plan Nord.
- Cree Vision of Plan Nord (Grand Council of the Crees, 2011)
- The Status of Eelgrass in James Bay (Fred Short, 2008)
- Chisasibi, Eelgrass and Waterfowl: A review of Cree traditional ecological knowledge and scientific knowledge (Migratory Birds Habitat Task Force, 2015)
- Status of eelgrass beds on the east coast of James Bay (Environment Canada, 2015).

Regions have different specific priority areas, but these are connected by the overarching issue of environmental changes occurring in the Bay. For Sanikiluaq entrapments of eider ducks is a priority

concern; in Nunavik beluga entrapments, and in James Bay disappearance of eelgrass habitats and associated species including fish and geese.

Research priorities and desired outcomes were summarized from past work (Including the Hudon Bay Programme, Voices from the Bay and the Migratory Bird Habitat Task Force):

- Which animals are important to use as indicator species? What are their diets, key feeding areas? What changes in shoreline areas/key habitats and changes in human health are associated with these indicators?
- How can we play a role in monitoring bigger scale change in global climate in the Hudson Bay/ James Bay context?
- What changes are occurring to the hydrological cycle due to regulation of rivers by hydroelectric development? How do hydrological changes affect ice formation and breakup, contaminants, water quality, wildlife including endangered species, sedimentation, oceanography and freshwater stratification?
- How do we maintain a healthy environment and land for future generations? Develop guidance for future generations, and cultural education for youth.
- Recognition of traditional ecological knowledge.
- Healthy environment with adequate monitoring systems in place.
- Maintain traditional foods and diets.
- Minimize the negative impacts of development.
- Conservation; Inuit and Cree need a say in the management of wildlife and research in the Hudson Bay bio region.

Presentations on Past and Ongoing Research

The Arctic Eider Society (Joel Heath) – An overview of the community-driven research network, oceanography and contaminants research.

Fisheries and Oceans Canada – Marine Mammals (Jean-François Gosselin) – Marine mammal research in the region includes beluga, walrus, and ringed seal.

University of Manitoba CEOS (Zou Zou Kuzyk) – An overview of research programs in the greater Hudson Bay region, including GENICE, the Churchill Marine Observatory, ArcticNet, and BaySys.

University of New Hampshire – Eelgrass (Fred Short) – An overview of eelgrass ecology, and the ongoing work to understand why it has declined.

Centre d'études nordiques (Maxime Saunier) – Research facilities available across Nunavik, and potential opportunities for participatory projects.

Inukjuak – Independent Research (Shaomik Inukpuk) – An overview of independent research and Inuit observations of environmental change in Hudson Bay and priority issues.

A full workshop on coordinating research was held on day 2. Please see Workshop 4 on page 25.

WORKSHOP 1: Collaborative Process for Creating a Hudson Bay Consortium

Chairs: Joel Heath and Lucassie Arragutainaq

Background and Goals

As outlined in the Timeline of Environmental Stewardship Efforts*, while many contributions have facilitated progress to-date and several planning meetings have now taken place, the Hudson Bay Consortium has not yet been formally created. The approach has been to create the Consortium through a collaborative inclusive approach that represents the needs of communities and stakeholders. To facilitate this process, a planning steering committee and planning secretariat have been formed. This workshop was organized to seek collaborative input on the process of formally creating the Consortium with the following objectives:

A. Identify regional priorities and roles for the Hudson Bay Consortium.

B. Discuss options for the structure and operations of the Consortium as well as timelines for its creation and future meetings.

C. Deliver clear next-steps for consultation on a vision statement and guiding document towards formally creating the Hudson Bay Consortium.

The workshops began with a summary of outcomes from previous meetings including priorities, possible structures and guiding documents towards facilitating a discussion that could deliver clear next steps for collaboratively creating the Consortium.

Workshop Summary

The need for an east Hudson Bay/James Bay regional roundtable as well as a Hudson Bay Consortium has been well established and was re-affirmed through discussions at this meeting. Many individuals indicated a desire for communities to play a leading role in developing environmental stewardship and to have a say in research. The necessity of considering a regional approach in both the east Hudson Bay/ James Bay region, and the greater Hudson Bay region was emphasized because of overlapping jurisdictions, animal movements, and downstream effects, and where actions and decisions in one area can affect many other areas. The interconnectedness of community well-being and ecosystem health was also emphasized. It was clear from this and previous

** document available at hudsonbayconsortium.com*

meetings that consortium-building should take place in a stepwise approach with consultation, input from communities, rights-holders, and other stakeholders.

The primary outcome of the workshop discussion was to prioritize collaborative development and consultation on a clear and concise vision statement for the Consortium as a part of set of guiding documents that would facilitate formally creating the Consortium. The discussion is summarized in sections on vision statement, goals and activities, scope, structure and sustainability. The outcomes of this discussion has been used to create a draft vision statement and guiding principals for the Consortium, to provide a basis for next-steps on consultation and feedback with communities and stakeholders. Agreement to work together through a Hudson Bay Consortium would not usurp any government's jurisdictional authority but would run parallel to government by developing strategies and practices that voluntarily support the responsible stewardship of the bay.

Key next steps for creating the Consortium were identified including increasing participation on the steering committee, fundraising and consultation on a draft vision statement/terms of reference with communities and organization towards developing a final version by the end of 2017. Comments generated from participants durring discussion are summarized in Appendix W1-A on page 7.

Vision Statement & Terms of Reference

In general, there was agreement that there is common ground and that a developing a clear statement of shared principles or a declaration was a priority step moving forward.

Some specific principles and values were suggested:

- Cooperation and solidarity.
- Respect, integrity (for land, resources, people)
- Respect for Indigenous rights, and human rights.
- Built on a backbone of Indigenous knowledge.
- Complex issues need interdisciplinary approaches.
- Consider cultural practices, psychological implications, socio-economic dimensions.
- Consider human/community health (ie. a holistic approach) in discussions about resource protection/development.
- Driven by voices of communities/rights holders.

An example vision statement that worked for a past caribou management group was presented as guide for consideration by Issac Masty:

"*Intimate relationship with the land is a dimension far from being a medical one, but certainly real, present and sensitive to the physical, mental and spiritual well-being of an individual and society as a whole. For thousands of years we have depended on the land and lived within the natural cycles of life. Understanding and respect of the land and for animals was and is fundamental for our survival. Respect for animals is an important component throughout the process of hunting and the life of a hunter. It is shown in many ways, but most importantly respect is show by harvesting only what is needed, and what the population can handle, and ensuring that all parts of an animal are used. These principles are the foundation for our youth and management of the land.*"

Goals and Activities

Several ideas were articulated around priorities for Consortium goals and activities:

- Resource protection and stewardship.
- Share information and Indigenous knowledge for protection of resources and people.
- Connect remote regions, e.g. east and west Hudson Bay.
- Provide an advisory role (versus a decision making role, which is the responsibility of e.g. land claim organizations).
- It was suggested that the Consortium could make more than just recommendations, and e.g. help develop shared policies.
- Could help place a focus on traditional knowledge towards helping implement land claims and treaties without upsetting the existing processes of co-management bodies.
- Could play a role in reminding those with responsibility of their duties within the complex jurisdictional structure.
- The Consortium should play an important role in coordinating community-driven research and monitoring and help ensure that Indigenous knowledge contributes meaningfully to research planning and activities (for details of discussions on research activities, see Workshop 4 on page 25.

Consortium Scope

There was agreement among participants that the initial focus of the Consortium should be on bringing together eastern and western regional groups, and that other areas (including Foxe Basin and Hudson Straight/Ungava Bay communities) could be considered further down the road.

Given the broad geographic scope of the greater Hudson Bay ecosystem, as well as complex situations and logistics unique to each side of the bay, it was suggested that eastern and western regional groups should be maintained. Sharing knowledge, capacity and communications infrastructure across the greater Hudson Bay ecosystem will be important, but meetings should focus on regional groups with less frequent joint east-west meetings and the exact relationship between east and west groups will need to be determined in the future.

It was agreed that the Consortium would primarily focus on the marine ecosystem, but possibly consider more terrestrial issues in the future.

Consortium Structure

A variety of structures were considered, many of which are outlined in the document "On Thin Ice: An Overview of the Governance of Hudson Bay". Unlike many existing governance structures, this group is unique in that participants represent diverse structures including communities, boards and planning commissions, land holding organizations, NGOs, researchers and various levels of government.

Participation and Membership

Participation during the planning stage is currently open to any interested stakeholders. There was extensive discussion on the details of how membership should be structured and who should be eligible. A focus on communities and rights holders, with the guidance of elders, was identified as a priority and to ensure that smaller groups and communities are on equal footing with larger organizations. Participants indicated that it is important to be inclusionary, while protecting the interests of the group from individual agendas, and from organizations that don't share a common vision (extremist animal rights groups were provided as an example).

To address these points, it was suggested that membership could be simplified by allowing groups to participate based on common values through their formal acceptance of a shared vision statement / terms of reference. Communities and stakeholders can determine their representatives on an ongoing basis with the goal of representatives facilitating a two-way transfer of knowledge between their organizations and the Consortium.

Steering Committee

A steering committee will be important for facilitating priorities of the member organizations and guiding activities of the Consortium through the secretariat. A chair or executive director would be responsible for coordinating meetings of the steering committee and would direct activities of the secretariat based on outcomes of the steering committee.

An informal planning steering committee has been established to facilitate creation of the Consortium, and is currently open to any interested parties with meetings several times per year, held by teleconference. Additional representation and participation was encouraged at the meeting. Once the Consortium is formally created, the steering committee could initially remain open to any members, with any future changes to this approach being brought to the members as necessary for their consideration and approval.

Secretariat

A secretariat will be a key component responsible for the daily operation of the Consortium and carrying out the activities of the steering committee, under the guidance and management of a chair or executive director. The number of positions on the Secretariat will likely change over time as the Consortium develops, with immediate priorities focused on 1) a logistics and administrative coordinator, 2) communications and strategic planning specialist, 3) executive director/chair.

A planning secretariat has been formed to-date and is being administered in-kind by The Arctic Eider Society, including providing capacity for administrative services and fundraising, planning meetings, reports and developing online and communications infrastructure to support creation of the Consortium.

Given registered charitable purposes for coordinating environmental stewardship in the greater Hudson Bay region, the Arctic Eider Society is willing to continue providing charitable fundraising and administrative support for the Hudson Bay Consortium, which would allow the Consortium to operate through a visions statement/terms of reference without formal incorporation. Changes to this approach in the future could be brought to the members for their consideration and approval.

Working Groups

Participants suggested working groups could be established as needed to address priority areas in more detail, beyond what can be accomplished by the larger group or the steering committee and secretariat alone. This could be an effective way to work together on common interests and to engage those with expertise in a particular area. Working groups could focus on specific activities and deliver outcomes to the larger group.

Suggested working group topics for early consideration included:

- Protected Areas
- Cumulative Impacts
- Communications/Outreach
- Education/Training/Youth
- Elders and Indigenous Knowledge

It was suggested that working groups could be co-chaired by two Consortium members and include local and other experts invited to participate in meetings as appropriate. The importance of creating a formal way for elders to participate in the Consortium was clearly emphasized, with a working group approach suggested as one possible way to help accomplish this.

Sustainability

Beyond creating the Consortium, a clear vision is needed for maintaining its operation and sustainability, including funding and administrative services. It was suggested that a clear advantage of working together as a group was that it can be easier to leverage funding.

Operational Funding for the Secretariat and Meetings

Given the different size and capacity of communities and stakeholders, it was agreed that a membership "fee"-based model would not be appropriate. A "contribute what/if you can" approach was generally favored, with an expectation that larger organizations would contribute more. A $20,000/year contribution has been suggested for regional organizations, with contributions provided to-date from the Government of Nunavut and matched by Tides Canada. A larger contribution from e.g. the Federal Government would be essential to longer term sustainability. Individual communities and smaller organizations would generally be expected to only provide in-kind support by contributing to travel for their representatives to meetings as well as their time involved in activities (e.g. steering committee or working groups).

The Consortium secretariat would contribute to ongoing fundraising and grant writing activities from charitable organizations, foundations, governments and all available sources to contribute to meetings, overhead and the long-term sustainability of the Consortium.

Funding for Research and other Activities

Additional fundraising and grant writing for specific projects could be taken on by working groups and members of the Consortium as needed.

Other Considerations

Participants raised additional points for consideration:

- Communities need adequate time for consideration and consultation on Consortium formation.
- Provisions should be made to provide hard copies of registration forms, telephone outreach to communities, and assistance for elders to register.

Next Steps/Action Items

- Confirm additional participation of individuals and organizations on the planning steering committee
- Participants should take the draft vision statement and guiding principals back to their communities and organizations for feedback and consultation, with a goal of developing a final version that all parties will agree upon by year end.

Workshop 1, Appendix A – Discussion

Highlights from discussion by workshop participants on the collaborative process for creating a Hudson Bay Consortium. Please note that some comments have been summarized for length and clarity.

- Think of Hudson Bay, James Bay, like a big cathedral in the south. And the people in that community or city don't want to see that cathedral destroyed. So what we want to do is think of James Bay, Hudson Bay, Hudson Strait as a cathedral. We don't want anything to happen to it. Or if something is going to happen we have to understand what that means to us. […] The only way we're going to know what's happening in Hudson Bay is if we work together. Look at the map of Hudson Bay/James Bay. We on the Belcher Islands, we're right in the middle of all that. Anything on the mainland affects us. Or along the coast.

- One thing we can all agree on is that there is a somewhat shared vision for Hudson Bay – that everyone wants to see it healthy, communities involved, traditional lifestyles protected, and you could go on and on. I think your guiding principles are something that almost everyone can agree to. It may be that you're looking for something like a well worded declaration that we want to sign on, saying 'yes, in theory we support those principles, we support those ideas, and these are things we feel strongly about.' Some of the objectives of the Consortium, they're pretty big topics – like coordinating research priorities, protected areas planning, ecosystem health, governance structures… There are a lot of groups represented here with very different roles. Many organizations might have a role in one topic but not all, or all of them to varying degrees. So I can see a consortium and working groups. I can see the need for that kind of structure, simply for the coordination to bring together the right people for each topic.

- It's a complex issue we're trying to address. We have a diverse group, different cultures, people of different disciplines they're specialized in. For me perhaps, I would like to see a statement of principles that would create a framework for what it is we're trying to achieve. And somehow what the end result would look like as a result of our efforts. Those principles could include something like: cooperation, solidarity. Maybe we should divide into groups to decide what those principles should be.

- The issue we're dealing with now is very complex, interdisciplinary. It involves culture, social development. It has psychological effects – as you all know, when Indigenous people can't hunt it affects them psychologically. There's the economic side of it, environmental and also Indigenous rights – we have rights that need to be recognized and addressed. As humanity we have come to the point where we start to question the way we do things. We have to go beyond the conventional way of doing things. Traditional knowledge is very important, it's multidimensional and it has not been interpreted in the language that is understood by science, the government. The onus to do that is on us as Indigenous peoples and we're talking about starting up an institute that would do exactly that, to interpret Indigenous knowledge. And if industry wants to do something they can come to the institute and find out how Indigenous knowledge will play into the planning of that project. We need to start practicing new ways of doing things. Because what we've done so far to the earth is not very nice. We need to bring harmony and balance to the natural world.

- My people depend on the marine region for livelihood. I want to see good governance for James Bay and Hudson Bay. I propose that we should start with a membership that consists of all communities within the vicinity of Hudson Bay and James Bay. According to my customs, we have to respect the guidance of our elders. They should be included in the membership.

- The Consortium should play an advisory role since we don't have power over landclaims. But there is so much overlap.

- We're taught as Crees that we're responsible for the land. Use resources, but when we leave we should leave it in the same condition or better. That's been Ingrained in us since children. Respect the land, resources. We need to get to the basis of that

responsibility. We need to agree on values such as respect and integrity.

- Rights holders. We use term we need to use that term. I'm not completely certain what role this round table will play. The first thing we need to do is to agree on what we need to do in the future. We need a statement of what we thing this table should be doing. Cree have different perspectives on wildlife management, but it doesn't mean we can't find ways of working together.

- There is discussion on coordination in the region versus at a Hudson Bay-wide scale. At the regional level, it is already a large group, not only in terms of logistics, but also in terms of capacity for people around the table to have an opportunity to comment and share their views. There is also a great deal of jurisdictional complexity in the Eastern Hudson Bay/James Bay region already. However there are potentially some shared challenges and goals between East and West Hudson Bay, so some coordination is desirable. Moreover, the East is downstream of the West, so there are direct connections in the marine environment.

WORKSHOP 2: Protected Areas Planning Across Juridictions

Workshops chairs: Jennie Knopp and Kailtin Breton-Honeyman

The goal of the workshop was to have a dialogue about the concept of protected areas (PAs) in James Bay/ South-East Hudson Bay.

Workshop Outcomes

- There appears to be much to be learned and understood by land claim organizations about what marine protected areas can, and cannot, do to assist with Inuit and Cree conservation wants and needs.
- Coordinating protected areas planning across the overlapping jurisdictions will be a necessary process if stakeholders wish to consider creating an effective network of protected areas that will facilitate coordinated stewardship for the region.
- One of the main benefits of protected areas extends beyond the protected status itself; the process of establishing PAs can help fund important research and the impact benefit agreements for PAs contribute important funding for long term monitoring and stewardship for the area.
- Clarified that protected areas do not affect the hunting rights of Inuit and Cree, rather they can help preserve land-use activities. It also does not necessarily mean that the current status is preserved, i.e. restoration activities can still take place to restore historical features of protected areas, so they resemble when they were pristine (e.g. eelgrass beds).
- A variety of different types of protected areas are available for consideration.
- Some people suggested a large network of protected areas across the jurisdictions could help establish long-term monitoring and coordinated environmental stewardship for the region, helping address many priorities and goals of the consortium stakeholders.
- While possibly more complicated to establish, protected areas may provide the greatest benefits for stewardship in overlap regions.
- It was made clear that the individual regions, represented by their land claim organizations will need to decide how they would like to proceed, before considering overlapping protections or a network of protections.

Next Steps

- Regional organizations and stakeholders to continue their own process of defining key priorities for protected areas and coordinate planning in overlap regions.
- Host a follow-up workshop on protected areas planning across jurisdictions at the next consortium meeting.
- Work to establishing a protected areas working group for the consortium, towards creating a protected areas strategic plan for the region, under the guidance of the land claims organizations.

Detailed Workshop Report

The workshop on protected areas planning was co-chaired by Jennie Knopp from Oceans North (a non-government organization) and Kaitlin Breton-Honeyman from Nunavik Marine Region Wildlife Board in Inukjuak.

Since the jurisdictions in this area are considering, or are already working on, protected areas, this workshop offered an opportunity to discuss concerns and questions, share examples of planning underway in other parts of the north (e.g. Inuvialuit Settlement Region) and to consider how the various land claim jurisdictions (Nunavut, Nunavik and Eeyou Marine Regions, as well as the marine region used by the Mushkegowuk Cree in western James Bay) might consider working together on these initiatives.

Background and Opportunities

Canada's federal government has committed to expanding marine protection as a recent priority. This is an opportunity for northern coastal communities both to protect important habitat areas, but also to establish funding sources for baseline data collection, long-term monitoring, ecosystem restoration, and other economic benefits associated with protected areas.

In Sept 2015, the Trudeau government announced a plan to protect Canada's oceans:

"A Liberal government will meet Canada's international commitments by increasing the amount of Canada's marine and coastal protected areas from 1.3% to 5% by 2017, and 10% by 2020 and reinstate $40 million cut from Canada's ocean science and monitoring programs and restore scientific capabilities of DFO and work with provinces, Indigenous peoples and other stakeholders to effectively co-manage the oceans."

US-Canada joint statement on climate energy and arctic leadership (March 2015), reaffirmed this commitment through the Shared Arctic Leadership Model:

"Conserving arctic biodiversity through science-based decision making Canada and US affirm our goal of protecting at least 17% of land and 10% of marine areas by 2020. We will take concrete steps to achieve and sustainably surpass these goals in coming years. Specifically we will work with Indigenous partners, state and territorial and provincial governments to establish this year a new ambitious conservation goal for arctic based on the best available climate science and knowledge, Indigenous and non-Indigenous alike. We will also play a leadership role in encouraging all arctic nations to develop an arctic marine protected area network."

Proceedings

Workshop participants were invited to contribute to maps of the Hudson Bay region to identify areas of importance and notes that can be used to inform future discussions on the topic.

Workshop facilitators introduced the different types of protected areas that could apply to marine regions and circulated a handout to participants (see Appendix W2-A on page 16). These include:

- Marine Protected Areas (MPA) and fishing closures (Fisheries and Oceans Canada);
- National Wildlife Areas (NWA) and Migratory Bird Sanctuaries with a marine component (Environment and Climate Change Canada);
- National Marine Conservation Areas (Parks Canada);
- Land claims have provisions to allow for specific types of marine protection;
- Indigenous Marine Protected Areas (not yet legislated, proposed and discussed by Mary Simon under the Shared Arctic Leadership Model).

Department of Fisheries and Oceans representative Cal Wenghofer presented a case study on the process of establishing federal MPAs in the Inuvialuit Settlement Region (ISR) (see Appendix W2-B on page

18 for further details). The first MPA developed in the Mackenzie estuary, the Tarium Niryutait Marine Protected Area, was a collaborative effort between the Inuvialuit and the federal government, established in 2010. The Anguniaqvia Niqiqyuam Marine Protected Area in Darnley Bay near the community of Paulatuk was officially designated in Nov 2016.

Discussion during the workshop was wide ranging. Participants from around the region gave updates on ongoing protected areas planning, and a number of individuals proposed areas they believe are deserving of protection. Concerns raised by a number of individuals underscored the need for communities to have additional information on what protected areas are and how they might co-exist with traditional land-use activities and fit within land claim settlements. Due to the number of different options available for marine protection, many people had questions about what marine protection really means, how it is enforced, what type of funding is associated with the different types of marine protection to support everything from administration to monitoring.

Discussion on the possible benefits of protected areas were outlined, including funding for research and monitoring, and as a way to work together. Further discussion revolved around what tools are available to meet goals for coastal and marine environmental protection. These tools may be the creation of protected areas, but may also include increased community involvement and responsibility in activities that have often been driven by either federal agencies, or others outside of the community, such as ecological restoration, oil spill response, search and rescue, environmental assessments, monitoring, etc.

While a large network of protected areas was proposed across the bay by some people in attendance, others wanted to take time to clearly define goals for protection, better understand the tools available and their implications, and to consult with their community members and land claim organizations.

Outcomes & Next Steps

- A number of potential benefits of protected areas were identified, including long-term monitoring, ecosystem restoration, community health (access to food and ways of life) and other economic benefits (tourism, etc), source of funding for consortium.
- Several key areas to consider for protected areas were proposed by partcipants.
- Coordination across jurisdictions through protected areas planning can be useful for sharing information between communities while respecting decision-making processes through land claims.
- Due to the range of options within protected areas, greater awareness is required for communities to understand the pros and cons of various approaches.
- Communities and regions need to identify priority areas that could benefit from protection, and articulate specific goals for protection in collaboration with their land claim organizations responsible for the implementation of the marine protections.
- Land claim organizations in each region need to continue the process of determining their next steps for protected areas before cross-jurisdictional coordination can occur.
- Participants indicated a desire to coordinate communication between jurisdictions on ongoing protected areas efforts, and support ways of working together in areas of overlap including future workshops through the Consortium.

See Appendix W2-C on page 19 for further details and key comments from participants.

Table 1. Types of Marine Protection in Canada

(**Acronyms used in Table:** CWS=Canadian Wildlife Service; DFO=Fisheries and Oceans Canada; ECCC=Environment and Climate Change Canada; FC=Fishery Closure; ISR=Inuvialuit Settlement Region; MPA=Marine Protected Area; NLCA=Nunavut Land Claim Agreement; NMCA=National Marine Conservation Area; NP=National Park; NMPC=National Park Marine Component; NWA=National Wildlife Area; PC=Parks Canada)

Type of Protection	Agency	What can be protected	Special provisions or considerations	Law(s)	Further Information
Marine Protected Area (MPA)	DFO	Marine species, habitat, biodiversity, biological productivity, other marine resources	Indigenous rights respected	*Oceans Act*	http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/index-eng.html
Fishing Closure (FC)	DFO and Land Claim	Harvestable species	Subsistence and Inuvialuit commercial fisheries licences not included	*Fisheries Act* Land Claims	http://www.cbc.ca/news/canada/north/beaufort-sea-commercial-fishing-banned-1.1028286
National Wildlife Area (NWA)	ECCC (CWS)	Migratory birds, species at risk and other species of national interest through habitat protection	Indigenous rights respected	*Canada Wildlife Act*	https://ec.gc.ca/ap-pa/default.asp?lang=En&n=2BD71B33-1
Migratory Bird Sanctuary (MBS)	ECCC (CWS)	Safe refuge areas for migratory birds in terrestrial and marine environment	Indigenous rights respected	*Migratory Birds Convention Act*	https://www.ec.gc.ca/ap-pa/
National Marine Conservation Area (NMCA)	PC	Seabed, water above it, may also include wetlands, estuaries, islands and other coastal lands	Indigenous rights respected, Impact Benefit Agreements, in some instances sustainable uses such as harvesting are allowed in some zones	*Canada National Marine Conservation Areas Act*	http://www.pc.gc.ca/progs/amnc-nmca/index_E.asp
National Parks Marine Component (NPMC)	PC	Marine waters that are included within National Parks	Indigenous rights respected	*Canada National Parks Act*	http://www.pc.gc.ca/progs/lhn-nhs/intro_e.asp

Table 2. Examples of Northern or Indigenous Marine Protection in Canada

(**Acronyms used in Table:** DFO=Fisheries and Oceans Canada; ECCC=Environment and Climate Change Canada; FC=Fishery Closure; ISR=Inuvialuit Settlement Region; MPA=Marine Protected Area; NLCA=Nunavut Land Claim Agreement; NMCA=National Marine Conservation Area; NP=National Park; NPMC=National Park Marine Component; NWA=National Wildlife Area; PC=Parks Canada)

Protected Area	Date	Agency	Location and Goal	What is protected	Provisions for Inuit or Indigenous rights	Indigenous Harvest rights?	Website link
Tarium Naryutait Marine Protected Area (MPA)	2010	DFO	Mackenzie River outlet and Beaufort Sea, ISR: To protect largest summering populations of beluga, habitat and harvesting rights	Three ecologically important marine areas protected for: Beluga and marine species, harvesting traditions, and prohibiting activities that negatively impact beluga	Beneficiaries can harvest and collect for their economic, social and cultural needs as per IFA	Yes	http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/tarium-niryutait-eng.html
Beaufort Sea Moratorium on Commercial Fishing (FC)	2011	DFO and ISR Land Claim	Beaufort Sea, ISR: Prohibits new commercial fishing licences from being issued, to prevent rush of fishing with opening sea ice, to give time to develop a comprehensive ocean management plan	Fish and fish habitat	Beneficiaries can harvest and collect for their economic, social and cultural needs as per IFA	Yes	http://www.cbc.ca/news/canada/north/beaufort-sea-commercial-fishing-banned-1.1028286
Anguniaqvia Niqiqyuam Marine Protected Area* (MPA)	2016	DFO	Western Darnley Bay and northeast coast Parry Peninsula, ISR: Protect ecologically and culturally important area to support subsistence harvesting of several species ***First Oceans Act MPA to have a conservation objective based solely on TEK and LEK**	Ecologically important migratory and feeding habitat for: Arctic Char, Beluga Whales, Ringed and Bearded Seals, Polar Bears, and the only Thick-Billed Murre Colony in the western Canadian Arctic	Beneficiaries can harvest and collect for their economic, social and cultural needs as per IFA	Yes	http://www.beaufortseapartnership.ca/initiatives/anguniaqvia-niqiqyuam-area-of-interest/
Ahiak (Queen Maud Gulf) Migratory Bird Sanctuary (MBS)	1961	ECCC	Near Bathurst Inlet, Kitikmeot Region, Nunavut: Protection and conservation of migratory birds, including species listed under the Species at Risk Act	First created to protected Ross' Goose; now home to millions of migratory shorebirds, songbirds, ducks and geese during the summer	Beneficiaries can harvest and collect for their economic, social and cultural needs as per NLCA	Yes	https://www.ec.gc.ca/ap-pa/default.asp?lang=En&n=20CAE357-1

Workshop 2, Appendix B – Case Study: Establishing an Marine Protected Area

Cal Wenghofer (Fisheries and Oceans Canada) led a brief overview of the process involved in establishing a Marine Protected Area (MPA) in the Inuvialuit Settlement Region (ISR) through the Beaufort Sea Partnership.

DFO has been working in the ISR though the Inuvialuit final agreement land claim to develop marine protected areas. The first MPA developed in the Mackenzie estuary, the Tarium Niryutait, was a collaborative effort between the Inuvialuit and the federal government. Industry was also involved since there was a lot of oil and gas interest in region. It was established in 2010. Anguniaqvia Niqiqyuam was officially designated in Nov 2016.

A committee discusses where an MPA might be considered, gathering information

The Inuvialuit game council, hunter and trappers committees, regional corporation and all the land claim bodies are part of a committee brought together to discuss where an MPA might be considered and ultimately put in place. It's a very collaborative model. This committee would get together well before there was any decisions made for any area of interest for a marine protected area. This group would sit down, gather the information – socio-economic, traditional knowledge, ecological – and really do a screening of the available information for the region.

Involvement of integrated management initiative / working groups

One advantage in this area is very similar to what is being discussed here over these two days, there's an integrated management initiative within the region. Again, it's a partnership between the Inuvialuit and the federal government as well as the Yukon and the NWT territorial governments. And a lot of the work has gone into pulling together ecological info, identification of significant areas. There are a number of working groups within the governance structure of this partnership including a traditional knowledge working group that works to assist in bringing information together. In those initial stages it's really about trying gathering information and trying to identify where we might be looking to establish protection.

Establish a formal process

As an area of interest is identified through the committee, then it becomes more of a formal process. There are ecological overviews for the area, socio economic overviews, resource overviews and the traditional knowledge working group brings in that component. Within the southern portion of the Anguniaqvia Niqiqyuam the objectives were related to char in fact were based on traditional knowledge that was brought to the committee from the working group, from the elders. And that's a very strong component of the work that has gone on in the past for both of these MPAs.

Consultation & Regulatory Intent

Consultation is such an integral part of all this. While we do have the committees that is doing much of the work there is six communities in this region and depending on which areas are being looked at, the communities are involved in the process right from the beginning as it's initiated up to management and developing a management plan, taking part in the management.

After all the info is gathered around an area of interest, the consultations are key because you are developing the regulatory intent. Working with the partners around the table in terms of what would be prohibited and what would be not be prohibited. And coming to agreement on that as well as the boundary the ultimate boundary of the MPA. And that's really based on traditional knowledge and science being brought together. And once we have that agreement, then there's a regulatory phase through the Oceans Act that has to happen.

Lengthy process

Depending on the issues and how consultations go it can be a fairly lengthy process. Our first MPA in the region took approximately 10 years. And we're narrowing that down as we go.

Workshop 2, Appendix C – Further Details and Key Comments

What's happening around the region?

- The Nunavik Marine Region is starting to think about protected areas since it has become a priority for the federal government. A workshop was held in May and other meetings are planned with the LNUKs and RNUK. They have been working on a draft conservation atlas that could be part of the protected area planning process.

- Nunavik Marine Region is working to create a conservation atlas that can inform the community consultation process that has to be undertaken as part of our Nunavik Inuit land claims agreement before any protected areas or designations are created.

- The Cree Nation Government is at an early stage in implementating the Eeyou Marine Region Land Claim Agreement. But it does allow for the potential to create protected areas. It's a long and complex process but the government is interested in the concept. CNG has initiated discussions with Parks Canada, specifically on the National Marine Conservation Area context, and will be looking at developing a working relationship around the concept of a feasibility study for that area.

Important areas

Land claim organization as well as non-government organization participants identified several areas of importance. In addition to the importance of Belugas for Nunavik communities these included:

- The Ottawa Islands (polar bear habitat)
- The Sleeper Islands (important marine bird/ mammal habitat)
- Belcher Islands (key polynya/floe edge and other habitats for marine birds/mammals)

"There are a lot of beluga stocks that come to the Belcher Islands, like from Churchill, western Hudson Bay, eastern Hudson Bay, James Bay now we are beginning to know that we have a Belcher Islands stock that stays all year round. Which is why I want to see the whole Belcher Islands protected as important habitat."

- Eelgrass beds / goose habitat in James Bay (currently in need of restoration)

- Nottingham Island and Salisbury Island – walrus colony. There's concern that increased ship traffic will drive the walrus back towards mainland and disrupt seal populations.

The definition of protected area needs clarification

- With many different forms of protected areas, regions will have to select the right tool for the job.

- Community concerns over hunting rights being limited.

- Strategies for protecting migrating animals (not just habitat).

- "I think protected areas might be a really powerful way for all the right's holders and stakeholders around the table to work together towards creating something that upholds how Inuit and Cree see those areas being used."

- "I wanted to bring up something about the word protected. I think it's important that the word has different connotations. It's really about maintaining the health of the ecosystem and just as much of that is about protecting the rights of Inuit and Cree to hunt in those areas as it is about protecting the animals. It's really not about stopping hunting – all the rights under the various land claims are guaranteed, and really it's about protecting those rights from outsiders coming in."

- "I kind of see it as the unfinished business of land claims processes and when I think about marine protection, I think of this as one avenue, one opportunity not to create floating parks, but for allowing communities formally back into a conversation with federal agencies to provide for local management of those ocean and sea resources. So I would encourage organizations at this table to think really broadly and expansively about what marine protection means and what it might mean. And the kind of roles and responsibilities beyond the classic view of a marine protected area. So, think about transportation implications, fishing, hunting."

Challenges ahead and questions to be answered

- Close coordination will be required to plan protected areas in overlap areas.

- A working group model (similar to the Inuvialuit Settlement Region MPA development process) could help alleviate these potential conflicts: "that example of working group has worked well for Nunavik on other issues, like on polar bear management plan for example. So that maybe that's a model to continue to pursue for marine protected areas."

- Planning for protected areas could help regions working through land claim implementation "We're not necessarily there yet, but an important part of the challenge lying ahead right now is to make the planning and decision-making process accessible and relevant at a community level. I think for me the interest of the consortium is that provides a framework for discussing with communities what role they want to play and what they need to know about the institutional challenges involved in trying to make these land claim settlements work."

- "The land claim in the offshore areas for the Nunavik Marine Region and Eeyou Marine Region are relatively young and the conversations and how to navigate through implementing that is an ongoing conversation that needs to continue between the rights holders, co-management partners and the institutions of public government."

- There are concerns about the implications of protecting areas that are already degraded, such as the eelgrass beds along the James Bay coast. "But now that it's heavily impacted, what would we be protecting, I guess is our question. Why would we be protecting it? I think it's a little too late for some of these places."; however others see this as an opportunity to secure funding for restoration work, or further monitoring.

- Who enforces protection? Who is going to regulate the protected areas? (local community engagement in enforcing and monitoring these areas is likely an important piece)

- How do funding differs between the different tools, or types of protection? What funding models exist?

Potential benefits of PAs

Participants discussed the potential benefits of designating protected areas, which can include:

- Capacity for long term monitoring and restoration
- Opportunity to collect scientific baseline in areas known through traditional knowledge to be important
- Long-term ecosystem health; supporting subsistence and cultural harvest.
- Improved resilience to climate change, protect biodiversity.

What tools are available for communities? (protected areas is perhaps just one tool of many)

There is general discussion about needing to first define specific objectives for an area and then determine what tool is right for the job, whether it is a federal Marine Protected Area, or another form of protection enacted through a land claim or other process.

- "I think there's an opportunity to look at what are the areas with strong ecological values, cultural values in Hudson Bay, James Bay and try to put that together and then look at what are the best mechanisms to use."

- The Indigenous protected area concept being promoted by Mary Simon offers a bottom-up approach that starts with communities.

- "I think that it's important to remember that a designation in and of itself doesn't actually change anything about the waters around you. Calling something a protected area doesn't necessarily make it more protected. It's the activities that go on inside it and the activities that potentially flow from some of these designations that are critical to think about."

- Land claim settlements around the region all contain provisions dealing with the federal responsibility for environmental monitoring.
- It is possible to consider marine management and protection by negotiating community control or involvement in traditionally federally-managed activities such as oil spill response, search and rescue, monitoring and environmental assessments, hydrographic studies, marine harvest issues, etc. Mary Simon's Shared Arctic Leadership Model is considering ways to shift more responsibilities to communities.

A note on terminology and translation in the context of protected areas

While many community members and stakeholders have a good understanding of how protected areas can be defined, there is still confusion among some individuals about the definition and translations of "protection" and "conservation" in this context. For example, some individuals immediately think of the closure of the Nastapoka River for beluga hunting when they consider the definition of "protection", and require clarification that in the context of protected areas, hunting and land use rights of Inuit and Cree are maintained. Similarly, due to the use of the term "conservation" for conservation officers, some people's definition of conservation implies enforcement for poaching/hunting regulations.

Other discussions indicate that clarification should be provided around preserving the pristine natural state of ecosystems vs protection meaning that the current state would be preserved even for areas that may have undergone disturbance. Follow-up discussions to the workshop considered the importance of translating the terminology for protected areas effectively in Inuktitut and Cree, so people better understand that protected areas are intended to facilitate 'keeping things in a natural state', 'preventing disturbance from development activities', 'monitoring to ensure stewardship of the environment and wildlife', 'areas to monitor and preserve', or to 'make sure nothing happens to them' or 'so we can continue to hunt and harvest for all future generations.'

WORKSHOP 3: The Hudson Bay Arcticnet IRIS (Integrated Regional Impact Study) Synthesizing Current Environmental Knowledge and Identifying Research Priorities

Workshop chairs: Lauren Candlish, Zou Zou Kuzyk, Jonathan Andrews

This workshop was intended to provide background on ArcticNet, its integrated regional impact studies (IRIS) and ongoing work to create a Hudson Bay IRIS towards synthesizing current environmental knowledge and priorities, and to establish connections with and to gather input from community members and organizations participating in the Hudson Bay Consortium meeting.

Workshop Outcomes

- A survey was given to participants (Appendix W3-A on page 24).
- Community members were invited to contribute to community profiles that will be published as part of the IRIS.
- A number of comments on research priorities and better intergrating Hudson Bay/James Bay communities in the research process were made.

Next Steps

- Follow up on community profiles.
- Synthesize survey results.

Background on ArcticNet and IRIS reports

ArcticNet is a federal network involving academics, government and northern partners that has been conducting arctic-focused research across Canada for roughly 15 years. ArcticNet has supported a wide range of research efforts in the Canadian Arctic, including many projects carried out on board the Amundsen research vessel. There are several ongoing ArcticNet projects in Hudson Bay at the present time, both involving work from the Amundsen and involving community-driven research.

One of the ArcticNet mandates is the production of Integrated Regional Impact Studies (or “IRIS reports”) for four broad regions of the Canadian Arctic. These IRIS reports are efforts to synthesize the current environmental knowledge in each region, to inform policy and management, and to identify future research priorities. The reports are overseen by a steering committee with regional representation. Researchers and collaborators from a range of

organizations spread across the country contribute materials. The reports are targeted for a broad, public audience.

The University of Manitoba CEOS is coordinating the ArcticNet IRIS for the Hudson Bay Complex (Hudson Bay, James Bay, Foxe Basin, and Hudson Strait).

Workshop Proceedings

The overall goal and objectives of the IRIS and an outline of the developing chapter structure and general content was presented. Each chapter will describe what is currently known in the subject area and any relevant projections for the future; the chapters will also identify priorities for future research. To be clear, the IRIS process does not involve generating new research but rather bringing together what already exists, synthesizing what it means in plain language, and identifying gaps, recommendations and priorities for future work.

Proposed chapters:

1. Introduction – A social and environmental overview of the region.
2. The Watershed
3. The Marine and Coastal Systems
4. Marine Ecosystems: Lower Trophic Levels – Nutrients, primary production, fauna (e.g., eelgrass, kelp), benthic invertebrate, fishes
5. Marine Ecosystems: Upper Trophic Levels – Migratory birds, waterfowl, marine mammals, and polar bears
6. Carbon Cycling
7. Contaminants
8. Hydroelectric Development and Freshwater impacts
9. Transportation – Shipping and traditional travel in the region; transport-related environmental change
10. Ecotourism and Marine Protected Areas
11. Summary and Recommendations (Recommendations will be developed by the steering committee and community partners).
12. The report will also include 1-2 page community profiles.

The workshop facilitators asked those participants interested in contributing to the community profiles to please get in touch.

The workshop was led by Lauren Candlish, Zou Zou Kuzyk, and Jonathan Andrews from the University of Manitoba's Centre for Earth Observation Science. For more information please contact Zou Zou Kuzyk, co-lead for the Hudson Bay Complex IRIS, at zouzou.kuzyk@umanitoba.ca or Michelle Kamula, assistant coordinator, at michelle.kamula@umanitoba.ca.

Workshop 3 - Appendix A - Survey Responses

Survey template

Name:
Organization:
Community:

If you would like further information or to be involved with the Hudson Bay IRIS please list an email address or phone number where we can contact you. Email Address/phone number:
Please list key topics or priorities you would like addressed in the Hudson Bay Iris:
An issue that has not been addressed or a topic that is of particular interest to your community or organization:

Summary of responses

- A total of 28 responses were received, of which 25 provided contact information:
- 16 from representatives of communities or community-level organizations.
- 8 from representatives of regional-level organizations (e.g. Makivik Corporation, Eeyou Marine Region Boards).
- 4 from representatives of broader-level organizations (e.g. Nature Conservancy, DFO, Oceans North Canada).

- 1 from Kuujjuarapik
- 3 Whapmagoostui
- 3 from Chisasibi
- 3 from Wemindji
- 2 from Sanikiluaq
- 2 from Waskaganish
- 2 from Akulivik
- 2 from Eastmain
- 2 from Inukjuak
- 1 from Ivujivik
- 1 from Ottawa
- 1 from Pangnirtung
- 5 unspecified (all representatives of regional- or broader-level organizations)

Breakdown by respondent home community
Breakdown by identified "key topics or top priorities"

- 17 responses in total, and amongst these….:
- 6 mentions of impacts of hydroelectric dams/ regulation and freshwater on James Bay/Hudson Bay water quality, habitat, and ecology.
- 5 requests for community input and consultation on both content and the ultimate summary/policy recommendations; and/or request for TK integration in the document.
- 2 mentions of eelgrass.
- 3 mentions of wildlife habitat in general.
- 2 requests for more documents and information
- 1 mention of mining (and resultant shipping) impact on estuarine habitat in the Akulivik area; particular concern for Arctic Char.
- 1 mention of new plane traffic routes causing displacement of birds from islands traditionally used.

Selected comments/themes from open-floor session

A number of respondents discussed the relationship between researchers and community members or elders. The following points were put forward:

- Community participants in research are often not sufficiently compensated for their input. E.g. elders should be compensated when they provide traditional knowledge.
- Some community members or community regions are experiencing social science research fatigue.
- Northern communities should have more opportunity to design research or take a leading role in it, and should be compensated accordingly in those circumstances.
- Sometimes southern researchers don't do a sufficient job of returning the results/outcomes/ products of a study to the communities that were involved in the study.

Some specific environmental topics mentioned

- One respondent from Inukjuak asked that mercury and other contaminants be discussed, specifically related to their presence in food species at the bottom of the ocean. The respondent also expressed concern that shipping on the route to the Port of Churchill may damage the sea ice and/or affect ice conditions, and that the ice damage may be incorrectly attributed to climate change. Finally, the respondent presented that Arctic Cod are moving farther north and are dwindling near the southern communities.
- A participant from Sanikiluaq wondered if the shipping to and from Churchill explains the new occurrence of animals he had never seen before showing up in the Belcher islands. This person also told a story about a seal that had been tagged for research, explaining why he does not like the practice and stating that he would prefer a less invasive method.

WORKSHOP 4: Planning for Coordinated Research Across Regions

Workshop chairs: Joel Heath, Lucassie Arragutainaq

Summary

The goal of this workshop was to consider ways to coordinate ongoing and future research in the greater Hudson Bay region, particularly as it relates to assessing larger scale cumulative impacts. As a background to the workshop, many individuals and organizations gave a brief presentation on their ongoing programs during the first day of the meeting and some of the discussion summarized here was also from day 1. Discussion also considered the role of the consortium for helping to facilitate communication and coordination of research and the importance of Indigenous knowledge and community priorities in driving research priorities. Tools currently being used and developed by the Arctic Eider Society for archiving and sharing results of community-driven research were presented as a basis for discussion on expanding these capabilities to facilitate broader communication, knowledge sharing and tools for environmental stewardship for the Consortium.

Current ongoing research (Day 1 Presentations)

- Arctic Eider Society – Community-driven research Network
- Fisheries and Oceans – Marine mammal research (beluga, walrus, ringed seal)
- University of Manitoba Centre for Earth and Observation Science – coastal oceanography, GENICE, Churchill Marine Observatory, ArcticNet, and BaySys projects
- University of New Hampshire – Eelgrass
- Centre d'études nordiques – Climate science and research station network
- Nunavik Research Centre (Makivik Corportation) – animal population monitoring, contaminants, trichanella testing, etc.

Discussion Outcomes

- Important that this consortium has a say in what research is taking place, make sure it's relevant to community concerns and priorities.
- Many participants desire greater inclusion of communities and Indigenous knowledge in research projects initiated by academics and governments.

- Some communities are tired of waiting for others to do research and want to do their own.
- It was suggested that ongoing monitoring can help systematically document key indicators so when problems arise communities and elders can present detailed findings to developers, governing bodies, etc.
- Research fatigue from social science interviews that often ask similar questions was discussed, with a desire to coordinate what knowledge is already out there before new studies are conducted.
- There are feelings of mistreatment in certain communities over the way that research is conducted and how fisheries are managed, particularly with respect to belugas.
- Participants pointed out that a Niskamoon/Hydro Quebec steering committee has been formed toward coordinating eelgrass research in the region, but no representative was in attendance to present.

Online tools to coordinate research

This workshop gave an overview of the online tools currently being used by the Arctic Eider Society for coordinating research as part of its Community-Driven Research Network (CDRN), and suggested ways this platform can be expanded for use by the Consortium for communications and planning. The Interactive Knowledge Mapping Platform (IK-MAP, available at www.arcticeider.com/map, the online map, database and social media network, is being used in Sanikiluaq, Chisasibi, Kuujjuaraapik, Umiujak, Inukjuak to share results of research programs such as water monitoring, and food web contaminants. It can be easily expanded to serve other communities and projects. While communities are working geographically far apart on shared goals, this kind of technology can help the Consortium work together.

Addendum

Funding to support this platform under the new name, SIKU, was recently awarded from the Google Impact Challenge in Canada.

Share research results

Currently data and results from research projects are shared on the map. This allows individuals working in each community to see the results of their efforts, access raw data, see how research programs are progressing in partner communities. The platform ties together parallel projects and demonstrates the big picture, facilitating coordination across the region.

Services

A work in progress, the platform will be a common place for people to access tools that can help them when they go out on the land to hunt. This includes recent weather, tides, and satellite imagery.

Profiles

The platform currently includes social media style profiles for people, communities, organizations, animals, sea ice types, and research tools. Tagging can be done with Inuktitut terminology and there is a desire to bring in Cree terminology as well. Profiles and tagging can be used to document observations on the map such as dangerous areas, wildlife sightings, etc. Profiles for organizations involved in the Consortium could provide a directory for Hudson Bay/James Bay and a way to keep other organizations up to date, including a common place to access reports, updates and other information across the bays. Profiles for communities are being compiled already for ArcticNet IRIS could also be hosted on the platform.

Document sharing

A document management system is being developed for the Consortium. Documents and reports can be uploaded and tagged. This will provide a way to archive, share and improve access to reports and other knowledge from stakeholders, communities and individuals.

Education

The platform is being expanded to include tools and resources for education and training.

Workshop 4 Apendix A – Discussion on Coordinating Research

A number of presentations on the first day addressed ongoing research and provided context for discussion in Workshop 4. A brief description of each is therefore provided here for reference.

Alan Penn - Advisor Cree Nation Government

Research - A lot of us are aware or perceive that this area has not received a great deal of attention; there's a lot of catchup to do. Adequacy of datasets for wildlife that supports both the Inuit and Cree economies and identify major gaps and see what can be done to improve our capacity moving forward

Stas Olpinski - Makivik Corporation

The Nunavik Research Centre centre carries out research priorities for Nunavik Inuit. Research and environmental monitoring is often conducted in collaboration with regional, provincial, and federal organizations. The research centre provides a key role in ensuring quality of country food (trichinella monitoring and prevention, fish population monitoring and prevention of disease, beluga sampling, etc.). It also provides logistical support for other government, university, and industry led initiatives, including wildlife population surveys, baseline environmental info, rabies testing, and heavy metals/contaminants testing.

Makivik has also worked to preserve Inuit knowledge for future generations in a land-use and ecological database. This critical knowledge informs wildlife research management decisions as well as education.

Elizabeth Copeland & Ryan Barry - Nunavut Impact Review Board and Nunavut Marine Council

Upcoming work includes a strategic assessment of Baffin Bay and Davis Strait regarding proposed seismic surveys, oil and gas development.

Mishal Naseer – Nunavik Marine Region Planning Commission & Impact Review Board

Planning Commission important activities to date:

- Launched a use and occupancy study, (completed June 2016) reaching all 14 Nunavik communities including Inuit populations of Chisasibi and Kuujjuaraapik.
- Conducting a data gap analysis towards designing the land-use plan.
- Undertaking a marine protected areas project (referring to protected areas within the marine region, not just federal MPA designations).
- Establishing and maintaining through events like Hudson Bay Consortium linkages with planning partners and to ensure people know who we are, what we're doing and how we're doing it.

NMRIB current activities:

- In collaboration with the Wildlife Board, updating research activities permitting process and streamlining the impact assessment process so it's easier for proponents and researchers who come into the NMR.
- Coordinating a cumulative effects assessment tool, connecting it with online resources.

Tommy Palliser – Executive Director of the Nunavik Marine Region Wildlife Board

Current priorities and activities of the NMRWB are:

- Working to incorporate more Inuit knowledge
- Set total allowable takes (with LNUKs and RNUKs)
- Ascertain the basic needs level for stocks and populations.
- Baseline studies along shipping routes
- Developing management plans for beluga, polar bear and other marine mammals
- Marine protected area project – preliminary meeting was held, now improvements to draft conservation atlas are underway.

Isaac Masty, Audry Lapenna, Sophie Fillion – Eeyou Marine Region

The Planning Commission's top priority is to develop a landuse plan for the EMR. The 7-stage current workplan is as follows:

1. Pre-planning. June 2014 – Sept 2017
2. Research and data collection 2017-2018
3. Analyzing info 2018-2020
4. Writing the plan 2020-2021
5. Approval of plan 2022
6. Implementation of plan begins 2022
7. Evaluation, monitoring and ammendments

Wildlife Board main activities:

- Establishing harvest levels for species stocks/pop in EMR.

- Cooperate with other wildlife management institutions within the EMR.
- Provide advice to other institutions relating to wildlife conservation and management with in the EMR.
- Manage a $5-million research fund.
- has a working relationship with CTA.

Research Fund:

- Research fund has been invested; earnings will be used to help fund research projects.
- Currently working to define and narrow down research priorities through community consultation
- Current top priorities emerging are:

1. Hydro development, eelgrass, and waterfowl: a large scale study on eelgrass mapping, productivity assessment, potential restoration of the beds, relationship with waterfowl, Canada Goose and Brandt in the context of cumulative impacts and climate change)
2. Local fisheries: stock assessment of fish populations, harvest effort evaluations, mapping, development of long term management under the context of cumulative impacts and climate change.

Roderick Pachano, George Lameboy and Pahren Tangye – Cree Nation of Chisasibi Migratory Birds Habitat Task Force and Chisasibi-Eeyou Resource and Research Institute

The taskforce has completed its study into the decline of eelgrass habitat, which collected knowledge and understanding from Cree, and gathered existing scientific data. The report made two recommendations:

1. A comprehensive research program be carried out to determine the factors causing this dramatic change.
2. Establish a community research centre

CNG and Hydro Quebec singed an MOU to follow up to these studies, a steering committee was created composed: Cree Nation Government, Hydro Quebec, the CNC, Niskamoon corporation, and hopefully other governmental entities and agencies. The major factors which will be researched are in respect to the wildlife habitat and particular to the decline of eelgrass are salinity, turbidity, nutrients, water temperature and sedimentation. Cree knowledge will form the basis of this research.

The Chisasibi Eeyou Resource and Research Institute was established in 2016. Goals are to perform research and provide resources that will enrich our community's ecological knowledge and economic growth; so most focused on applied research. The research approach will be a combination of collecting quantitative and qualitiative data by using scientific tools and the knowledge of our elders to answer our questions. Priority research topics include the eelgrass and traditional ecological knowledge, protecting our intellectual property, and skill development.

Joel Heath and Lucassie Arragutainaq – Arctic Eider Society

A comunity-driven research network has been established in 5 communities (Sanikiluaq, Chisasibi, Inukjuak, Umiujaq, and Kuujjuaraapik), and has been working on oceanography monitoring for 3 years, with many collaborators.
A current project is focused on the physical characteristics of coastal waters and sea ice in partnership with the University of Manitoba to better understand changes to sea ice and ecosystems.
For a study with the Northern Contaminants Program each of the 5 communities has been collecting mussels, eider ducks, gull eggs, seals, fish and plankton samples. This project aims to better understand contaminants in the food web and how water quality affects the whole ecosystem.
All data is shared publicly on an interactive mapping site (arcticeider.com/map)

Jean-François Gosselin – Department of Fisheries and Oceans, mammal research

Science reports are available on the web through the Canadian Science Advisory secretariat.

In the Hudson Bay and James Bay region, the department has been studying beluga populations and their seasonal migrations through aerial surveys, satallite tagging, and genetic analysis. The surveys will help understand the population size and distribution and can inform wildlife management.
They have also been studying walrus and ringed seal populations.

Zou Zou Kuzyk – University of Manitoba Centre for earth and observation science (CEOS),

CEOS has a number of projects ongoing in the Hudson Bay/James Bay region. The interdiciplinary group includes anthropologists, paleo climatologists, atmospheric scientists and geo-chemists.

GENICE is using genetic methods to study oil in an ice environment. Shipping is a big concern in northern areas. It became clear that not much is know about how oil will behave in an ice-covered area. The Churchill Marine Observatory will be a facility in Churchill where you can experiment with oil and ice. Closed pools will hold salt water, grow ice and carry out experiments.

Several projects within ArcticNet are led by University of Manitoba. Most look arctic wide with a focus on sea ice, contaminants, or the carbon cycle. In southeastern Hudson Bay we're studying freshwater-marine coupling. This collaboration with Arctic Eider Socity's communiy driven research network will help better understanding the processes that are affected by the freshwater and determining the sources of the freshwater, its flux through the system, how much it varies year to year, and the way the freshwater present in the region affects processes such as ice formation, distribution, and behavior of polynyas.

BaySys is a collaborative research and development project sponsered by NSERC and Manitoba Hydro. The study looks at Hudson Bay as a whole to understand the contributions of hydro and climate change to changes in sea ice observed across the Bay.

Fred Short, University of New Hampshire, eelgrass

I have been working on eelgrasss in James Bay since 2004 with Chisasibi. I was asked to help restore the eelgrass, but we really needed to understand the problem. So we started a scientific investigation to understand what happened to the eelgrass. Experiments are in process to identify the threats to eelgrass, the causes of decline,

I am working with the United Nations to put together a map of all the sea grass in the world. We know almost nothing about parts of James Bay and Hudson Bay in terms of what's here.

Finally, there's an opportunity to work with the Cree and any other groups in the area to better understand the ecological system and put their ecological knowledge into a context of what we can also learn from satellite imagery, on the ground surveys and establish monitoring that can be done by the Cree in the community.

Shaomik Inukpuk – Inukjuak Town Manager, independent research

The current is moving counter clockwise around the Bay. We are at the receiving end of whatever is being put into this bay. And we are downstream of all the southern farming provinces. Knowing that all these cities use pesticides for farming. Their communities flood in spring. All these contaminations end up in this bay. That might explain some of the problems – eelgrass, and other. In 1992 pesticides were found in seal. Pesticides kill zooplankton that is needed to feed the food chain here. I want better management regimes put in place.

Water moves around. The scientific data says it takes 3 years for the renewal of water in this bay. We want a true global management regime put in place for this area. I would want the federal government to make more funding toward this to make this happen because all of us rely on this bay.

Discussion about on the ground coordination

- It is understood that not everyone has access to internet on a regular basis and efforts to coordinate research will require both online and analogue methods.
- There is an acknowledgement that development of a clear vision statement can also help to coordinate research as it will help define the Consortium and keep participating groups focused.

Thank You & Get Involved

Thank you for participating in this inaugural East Hudson Bay/James Bay Regional Roundtable. If you would like to get more involved, please consider joining the planning steering committee and help plan the Hudson Bay Summit. You can also follow the Hudson Bay Consortium on social media. Please contact us for more information.

The Hudson Bay Consortium secretariat is now consulting on a draft vision statement, with a goal of finalizing a simple and inclusive statement by the end of the year that will form a basis for creating the Consortium. Get involved and help us with consultation in your community or organization. Contact us for more details.

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**registered, unable to attend.*