



MPA WORKSHOP REPORT

Exploring ways to support Indigenous/Local involvement in, and Indigenous/Local led, marine protection in the circumpolar Arctic Ocean

Cambridge Bay, Nunavut, Canada, from March 19-21, 2019.

Exploring Ways to Support Indigenous/Local Involvement in,
and Indigenous/Local Led, Marine Protection in the
Circumpolar Arctic Ocean...*

***Report from the Fourth Expert Workshop on Marine
Protected Area Networks in the Arctic***

*19-21 March 2019
Cambridge Bay, Canada*

Summaries and Key Discussion Points

** is a reminder to us all that this is an ongoing dialogue, it does not end. We work together and continue to learn together.*

Report from a workshop held under the auspices of the Protection of the Arctic Marine Environment (PAME) Working Group of the Arctic Council in 2019: “Exploring Ways to Support Indigenous/Local Involvement in, and Indigenous/Local Led, Marine Protection in the Circumpolar Arctic Ocean”.

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BACKGROUND

For a review of the five-year history of the PAME Marine Protected Areas (MPAs) projects, see <https://pame.is/index.php/projects/marine-protected-areas>.

PAME's Framework for a Pan-Arctic Marine Protected Areas Network¹ document recognizes that individual Arctic countries pursue MPA development based on their own authorities and priorities, and that MPA networks can be comprised of both MPAs and other area-based measures that contribute to network objectives.

PAME's "Toolbox" project aims to develop guidance to assist Arctic states in advancing their MPA networks by providing theory and tools that can be used to assess and protect the diversity of genes, species, populations, habitats, features, and ecosystems; their interactions and processes; and their ability to adapt to change. Enabling collaboration and participation is an important aim of this project. As stated in the Framework for a Pan-Arctic Network of Marine Protected Areas, the purpose of a pan-Arctic MPA network is both "to protect and restore marine biodiversity, ecosystem function and special natural features" and to "preserve cultural heritage and subsistence natural resources for present and future generations."

Over the course of the 2015-2019 work cycle, project leads hosted the following workshops on connectivity in the Arctic:

- 1st MPA Workshop: Science and Tools for Developing Arctic Marine Protected Area (MPA) Networks: Understanding Connectivity and Identifying Management Models (22-23 September 2016).
- 2nd MPA Workshop: Understanding MPA Networks as Tools for Resilience in a Changing Arctic (2-3 February 2017).
- 3rd MPA Workshop: Marine Protected Area (MPA) Networks in a changing Arctic Climate (21-22 September 2017).
- 4th MPA Workshop: Exploring ways to support Indigenous/Local involvement in, and Indigenous/Local led, marine protection in the circumpolar Arctic Ocean (19-21 March 2019 – this report).

INTRODUCTION TO THE REPORT

This report presents the content and outcome of the 4th MPA workshop: Exploring ways to support Indigenous/Local involvement in, and Indigenous/Local led, marine protection in the circumpolar Arctic Ocean.

¹ <https://www.pame.is/index.php/projects/marine-protected-areas/framework-for-a-pan-arctic-network-of-marine-protected-areas>

The report can be used as a supplement to the information on the MPA workshop series provided on the PAME website.² The website includes a brief introduction to each workshop and provides links to downloadable versions of the presentations given at these workshops.

This report provides additional information to what is presented on the PAME website, including:

- Summaries and key findings from each presentation.
- Synthesis of group discussions.
- Key outcomes and next steps from the workshop.

SESSION 1: WORKSHOP INTRODUCTION AND SETTING THE STAGE

FOREWORD AND OPENING CEREMONY

The Director of the Cultural Heritage Society and the Mayor of Cambridge Bay, Pamela Gross, greeted participants of the 4th Marine Protected Areas (MPA) Workshop together with two community Elders. Pamela warmly welcomed participants to the community and to the brand new Canadian High Arctic Research Station (CHARS) where the workshop was hosted. One of the community Elders lit the Qulliq, an Inuit stone lamp which represents light and the warmth of family and the community, as part of the opening ceremony for the workshop. Once the Qulliq was lit, everyone stood in silence as a prayer was spoken by the second Elder, thereby officially opening the workshop.

The overarching purpose of the workshop was to explore the ways in which to work together to advance Indigenous/Local involvement in, and Indigenous/Local led, marine protection in the circumpolar Arctic Ocean. Outlined within the agenda were five key workshop objectives:

- 1) Develop our understanding of the state of Indigenous/Local involvement in, and Indigenous led, marine protection in the circumpolar Arctic Ocean;
- 2) Develop our understanding of Indigenous, Traditional and Local Knowledge as a foundational element in MPA and MPA network design and management;
- 3) Identify ways to support a spectrum of Indigenous/Local involvement in marine protection, including a community of information exchange;
- 4) Identify potential next steps in advancing the understanding of Indigenous/Local involvement in the identification, design, management and monitoring of marine conservation areas; and,
- 5) Develop a new tool, such as best practices or lessons learned for Indigenous/Local involvement in marine protection in the circumpolar Arctic Ocean that could contribute to the expansion of PAME's MPA Toolbox.

The workshop was divided up into the following five main themes:

² <https://pame.is/index.php/projects/marine-protected-areas>

- 1) Setting the stage
- 2) Indigenous/Local involvement in MPA identification and design
- 3) Indigenous/Local involvement in MPA management and monitoring
- 4) Indigenous/Local Governance models
- 5) Conclusion, Outcomes, MPA Toolbox, and Next Steps

The first two days were comprised of workshop presentations by various local and international experts relating to Indigenous/Local involvement and approaches in MPAs. Each presentation was followed by a period of questions and answers. To wrap up the workshop, breakout group sessions, based on topics identified by the group as being of key importance to the overall themes and objectives of the workshop, were held and final synthesis of key themes and messages were identified and brought forward for group discussion. The contents herein are composed of a summary of each presentation and the key discussion points of each.

THE PAME MPA NETWORK TOOLBOX

Martin Sommerkorn, World Wildlife Fund Arctic Programme

OVERVIEW

An overview of the PAME MPA Network Toolbox and key concepts related to the development of a network was presented. Topics such as connectivity and resilience, including social-ecological resilience, as well as resilience to climate change were discussed. An example of a key contribution to the Network Toolbox was an area-based conservation measures and ecological connectivity report developed from a previous PAME workshop. The document focuses on “other measures” and is intended to be a living document.

The PAME Network Toolbox is intended to be a framework for the development of a pan-Arctic network of MPAs. The MPA Toolbox project is a resource to develop guidance to Arctic states in advancing their own MPA networks. These MPA networks are not meant to stand alone; they should integrate key concepts at a Pan-Arctic scale, and form part of an “ecosystems approach” to management. Ultimately, this is meant to be a participatory and systems-based approach to protecting marine areas.

DISCUSSION POINTS

- It is commendable that the Government of Canada took this initiative to include an Indigenous Knowledge component in this workshop. A comprehensive report should be completed to ensure the workshop results are incorporated into the PAME process, including the MPA Toolbox.
- There is a lot of scientific knowledge, and at this workshop a two-way bridge has to be built that includes the people that live in the Arctic. A cohesive approach will provide more knowledge of what is going on around us.
- There is a lack of public awareness of the MPA products from the Arctic Council,

both at the community level and more broadly. There is a lot of work going into the reports and we need to identify how to ensure they reach a broader audience.

Session 1: Setting the stage

Session 1A: Growing international recognition and support for Indigenous leadership and self-determination with respect to protected areas and conservation.

THE INTERNATIONAL UNION FOR CONSERVATION OF NATURE (IUCN) GUIDELINES FOR INDIGENOUS PROTECTED AREAS

Mike Wong, World Commission for Protected Areas, North America Region

OVERVIEW

The presenter reviewed important definitions, and provided a breakdown of the International Union for Conservation of Nature (IUCN) Protected Area categories and their definitions. Each category has a primary objective and additional secondary objectives. The presenter then reviewed IUCN governance types. Governance of protected areas can fall on a spectrum of responsibility and accountability for decisions between different parties. These include government and its agencies at various levels, shared governance (including pluralist, collaborative and joint management bodies), owners of the land and natural resources concerned, and Indigenous peoples or local communities. In terms of the levels of protection defined by IUCN in the Arctic, the level will almost always be category five (protected landscape/seascape) or six (protected area with sustainable use), due to the vast areas that are covered.

A Protected Area (PA) is defined by the IUCN as a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature, with associated ecosystem services and cultural values. An “Other Effective area-based Conservation Measure” (OECM) is defined by the IUCN as “a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.” This includes associated ecosystem functions and services and, where applicable, cultural, spiritual, socio-economic, and other locally relevant values. The core difference between PAs and OECMs is that for PAs the primary objective is conservation, meaning certain human activities are prohibited within its defined area, whereas OECMs have other primary management objectives but should also deliver effective conservation of biodiversity. An example of an OECM is a military area—where conservation of biodiversity is not the main objective, but because use of the area is limited, the end result is that biodiversity is actually doing quite well.

Both PAs and OECMs are referenced within the United Nations Convention on Biological Diversity Aichi Target 11. The Target stipulates, “By 2020, at least 17 per cent of terrestrial

and inland water areas and 10 per cent 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 landscape and seascape.”³ If objectives are to be achieved it is necessary that local communities in northern remote areas are involved in meaningful ways. In the southern Canadian provinces various governance structures exist that do not necessarily apply in the northern Canadian territories. Therefore, there is a need to clearly establish who makes decisions and who is accountable.

DISCUSSION POINTS

- There is a spectrum of OECMs from sacred natural sites to local community areas. 2020 is a critical year. The Conference of the Parties meeting in Beijing, October 2020, will be important for determining future targets beyond the 17% and 10%.
- The PAME toolbox is consistent with the thinking around OECMs. CBD parties have agreed to the OECM definition (as of Fall 2018).
- Resources:
 - An introduction to ‘Other effective area-based conservation measures’ under Aichi Target 11 of the Convention on Biological Diversity: Origin, interpretation and emerging ocean issues Dan Laffoley, Nigel Dudley, Harry Jonas, David MacKinnon, Kathy MacKinnon, Marc Hockings, Stephen Woodley Aquatic Conservation: Marine and Freshwater Ecosystems. 2017; 27(S1):130 –137.
 - Day, J., Dudley, N., Hockings, M., Holmes, G., Laffoley, D., Stolton, S. & S. Wells, 2012. Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas. Gland, Switzerland: IUCN. 36pp.

Session 1B: Considerations on the use of Indigenous, Traditional and Local Knowledge

PINIARIARNEQ: HOW COLLABORATIVE RESEARCH CAN HELP INFORM SPATIAL PLANNING

Janne Flora, PhD, Aarhus University, Kingdom of Denmark

OVERVIEW

The presenter discussed their experience with “The Now Project”⁴ in Greenland. The Now Project is a large interdisciplinary project involving hunters, anthropologists, archaeologists, biologists, and it addresses the dynamics and relations between living resources and human societies in Pikialasorsuaq – the North Water (NOW) in a long term perspective. Anthropologists and biologists in the project was interested, partly in exploring how hunters

³ <https://www.cbd.int/sp/targets/>

⁴ <https://now.ku.dk/>

in Avanersuaq (Northwest Greenland) use the landscape today, and in pushing the methodological boundaries of interdisciplinary collaboration and between so-called scientific and local knowledge forms. Hunters were thus given GPS devices, programmed with a bespoke Cybertracker App we called Piniariarneq (Hunting Trip). The app tracked the hunters' hunting routes by boat, sled, or on foot. During their hunting trips, hunters could register animals they saw or caught, as well as take photographs, record film, or write notes – all geotagged. The result mapped the hunters' use of land, sea and icescapes. By using the data, those involved in the project worked collaboratively to identify trends and traffic intensity on the land.

It is important for the local hunters to participate in this project, as it narrows the gap between science and hunting, and gives rise to mutually beneficial cross-disciplinary conversation. The opened method of mapping, which hunters themselves is ultimately responsible for, allows local communities to many layers of their own use and experiences, such as stories, attachment to particular places, techniques, and anything else they themselves found important. The collaborative research approach showcased an improved method for integrating human use into spatial planning. The data helps policy makers to better understand the needs of local land use and self-determination. Ultimately, collaboration amongst all parties involved became the number one reason for the success of this project.

DISCUSSION POINTS

- There is an interest in continuing the project, and tracking data over the next five years.
- There may be interest in forming a UNESCO biosphere area.

SESSION 2: INDIGENOUS/LOCAL INVOLVEMENT IN MPA IDENTIFICATION AND DESIGN

GOVERNMENT OF CANADA - PROTECTED AREA CO-MANAGEMENT MODELS

Nicole Hutchinson, Department of Fisheries and Oceans Canada, and
Lori Bilecki, Environment and Climate Change Canada

OVERVIEW

There are a variety of perspectives on what co-management means and various contexts in which it is used in Canada. Government departments have adopted a range of models for including Indigenous peoples in protected area management and decision-making. In the Arctic, co-management boards have been established under modern land claim Agreements. These boards typically manage a wide range of land and resource matters, including protected areas. They contain representatives from Indigenous organizations, communities, and government, and operate under mandates

set out in the agreements. Some land claims agreements require the Government of Canada to negotiate an Impact and Benefit Agreement (IBA), as in the case in the Nunavut Settlement Area, when establishing a marine or terrestrial protected area, to ensure that any impacts are addressed, and that Indigenous communities acquire benefits as a result of the establishment of the area.

In the context of marine protected areas, DFO, ECCC and PCA all have marine protection mandates, with DFO providing a lead role in the coordination of oceans management and the development of a network of MPAs. Each of the three mandates are unique, and allow the departments to establish collaborative management arrangements, including when required by land claims agreements.

DFO establishes Marine Protected Areas under the *Oceans Act* for a variety of reasons, including the conservation and protection of species and habitats. The *Act* contains clauses for cooperation and collaboration with affected Aboriginal organizations and bodies established under land claims agreements. The *Act* also allows the Minister to enter into agreements with Aboriginal organizations.

Parks Canada establishes National Marine Conservation Areas to protect representative marine areas for the benefit, education and enjoyment of the people of Canada and the world. Parks Canada can enter into agreements with Aboriginal governments and bodies established under land claims agreements. For example, the Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site was designated based on a memorandum of understanding between the Government of Canada and the Haida Gwaii Nation, and management decisions are made via a management board made up of representatives of the Council of the Haida Nation and the Government of Canada.

ECCC establishes National Wildlife Areas (NWAs) and Migratory Bird Sanctuaries (MBSs) as protected areas primarily for the conservation of migratory birds and species at risk. Many of ECCC's protected areas in northern Canada have large marine components. The Department's primary focus on biodiversity conservation is a unique role in the overall mosaic of protected areas in Canada.

The signature of the Nunavut Agreement in 1993 resulted in the establishment of a new territory in Canada's north called Nunavut. The agreement established a roadmap for Inuit governance over the territory and its resources in the Nunavut Settlement Area. For parks and conserved areas, the Nunavut Agreement includes two articles requiring that an Inuit Impact and Benefit Agreement (IIBA) be negotiated between the responsible government agency and the Designated Inuit Organization before any new protected area can be established and, in addition, for any conservation areas that existed when the Agreement was signed.

In Nunavut, ECCC has established co-management arrangements with nine Area Co-management Committees (ACMCs) for the eight MBSs and five NWAs that are managed in accordance with its *Inuit Impact and Benefit Agreement (IIBA) for National Wildlife Areas and Migratory Bird Sanctuaries*. The Area Co-Management Committees are all

based in communities that are most closely associated with the protected areas. ACMC have an advisory role and make recommendations to the Environment Minister on all aspects of planning and management of NWAAs and MBSs in Nunavut.

DISCUSSION POINTS

- There are no shipping regulations that apply to the Cambridge Bay Arctic Char fishery.
- Concerns were raised by local residents that as more cruise ships pass through the area, there is potential to disturb wildlife, and cause declines in marine species populations.

IMPROVING THE RELATIONSHIP BETWEEN SCIENCE AND INDIGENOUS KNOWLEDGE

Shelly Elverum, Ocean Wise, Ikaarvik – Barriers to Bridges

OVERVIEW

There is a need to bring people and policies together. People need to be aware of what and how policies affect them. Not all information travels back to Indigenous communities. In Nunavut, the Inuk term for Indigenous Knowledge represents a whole way of being. It is not just about the data itself but the way in which people share knowledge.

Ocean Wise is an organization that is looking at how to support Arctic science and was the first organization to see what the community of Pond Inlet was doing to teach research to youth. Arctic youth are empowered to communicate that they are “the original Arctic scientists” and that they need people, governments and institutions to listen to their knowledge and expertise and provide them with funding and support to carry out Arctic science. An incredible opportunity exists in bringing policy and young people together—especially in Nunavut where 60% of the population is under the age of 30.

Together, Ocean Wise and Pond Inlet started a program called Ikaarvik, which focuses on youth aged 18-30. The youth from this program come up with their own research priorities with examples ranging from shipping, caribou harvesting, to climate change, and improving water quality. Youth are involved in all levels of the project from planning, developing methodology, analysis, and communication of the knowledge generated to the community. They also come up with their top ten research questions and present them to the community. These priorities relate better to what communities need and are rarely things that researchers and scientists in southern universities will come up with. In addition, researchers working with Ikaarvik have to prove that they are truly committed to working with the community. All the research questions and project plans are vetted by the youth—so there has been a shift in the power structure, leading to a strong reconciliation outcome. The youth represent a new generation that is learning to contradict or question southern researchers.

Ultimately, there needs to be better communication between southern researchers and

northern communities. In 2018, Inuit youth came together during an Ikaarvik “SciQ” Summit to create a plan outlining specific actions, behaviours, and protocols to demonstrate to southern researchers how Inuit knowledge principles can be used to create better relationships, meaningful engagement and, ultimately, better science. The impacts of this work include youth personal and professional development, as well as meaningful employment, decolonization of research, and enhanced capacity for communities to represent their own interests regarding research and science. In the end, this concept hinges on giving youth the time and space to assess priorities and come up with solutions that work best for their communities.

DISCUSSION POINTS

- Research is a tool that gives people a voice and is one of the few job opportunities that a young person in Nunavut has that allows them to stay connected to their culture and community.
- What the Inuit youth are doing is not just “science with traditional knowledge thrown in”; it is Inuit science.
- The point is to not leave the idea of what Indigenous Knowledge is and how to incorporate it into southern research to the southern researchers, but for those relationships to be influenced and defined by northern Inuit peoples.
- The reality is that it is difficult to find funding for this type of work. It is almost entirely community-driven. Capacity is an issue – for things like proposal writing, for example.
- More efforts need to be made in knitting together the policy and the people. For example, from a local perspective, many of the workshop presentations have used references to international processes that would be unfamiliar to the people most affected by them. We need to think of ways to try and shift how information is developed and shared, because there is currently a power imbalance.

OPPORTUNITIES FOR INDIGENOUS AND LOCAL INVOLVEMENT TO MPA NETWORK PLANNING: PERSPECTIVES FROM CANADIAN AND PAN-ARCTIC PROJECTS

Martin Sommerkorn, WWF Arctic Programme

OVERVIEW

MPA Networks follow an ecosystem approach to management. For areas requiring special management intervention, an invitation exists to participate in a transparent, and spatially efficient process through MPA Networks. The MPA network planning process systematically addresses questions like: What are we protecting? Why are we protecting it? How much do we protect? What are we protecting it from? And, how do we manage it? Protected areas are usually successful if the process considers a broad spectrum of knowledge that is participatory.

The pan-Arctic MPA framework has four systematic conservation planning principals:

- **Representative:** representing every kind of biodiversity such as species, habitats, ecological processes and ecological regions.
- **Adequate:** protecting enough to ensure resilience of biodiversity and continuity of ecological process that ensure ecosystem services.
- **Efficient:** Achieving objectives in a way that causes the least amount of impact to those involved.
- **Connectivity:** Connectivity refers to processes by which genes, organisms, populations, species, nutrients and/or energy move among spatially distinct habitats, populations, communities or ecosystems (MPA Center Report, 2017).

MPA network planning uses the Marxan analysis tool, in which quantitative targets are developed for each conservation feature (such as eel grass) and a cost is associated with each planning unit. The analysis is based on objectives of minimizing the total cost and total boundary of the reserve network, while also meeting all the conservation targets. The results manifest in a frequency map of selected cells over all the variables and layers, which are based on distribution and concentration. This tool is not the solution, but an aid for decision-making and planning. The constant iteration of the analysis provides opportunities for discussion and participatory processes. The tool may also be utilized to facilitate exploration of trade-offs between social, economic and ecological objectives. Though MPA targets are largely political, it may get to a point where it needs to be debated whether these targets are ecologically relevant. There is a need to move beyond political declarations and ensure that people who know about populations and ecosystems are involved in setting these targets.

The Pan-Arctic Marine Protected Area Network (PAMPAN) works to showcase and apply transparent analysis of data in order to initiate, engage, and facilitate a growing community of practice in an open and inclusive process. The goal of the network is to identify and map an ecologically representative and well-connected pan-Arctic network of marine areas, specially-managed for the conservation and protection of Arctic marine biodiversity, ecological processes, and associated ecosystem services and cultural values. The pan-Arctic biome scale deserves a dedicated analysis it is approximately 17 million square kilometers in size. In the “post analysis” phase there are opportunities for cooperation to learn from Indigenous Knowledge, including refining the approach, data, and analyses incorporating knowledge reflecting elements of special importance for Indigenous peoples and communities.

The Marine Ecological Conservation for the Canadian Eastern Arctic (MECCEA) project aims to identify priority areas for conservation based on ecological principles that rely on both scientific and Indigenous knowledge and that provide a basis for future MPA network planning and management decisions beyond MPAs. The Marxan tool is also run within this process following the identification of goals, selecting the conservation features, collecting the data, and assigning conservation targets. In this phase of the process, ecological conservation features are mapped using Inuit ecological knowledge. The process finishes with a revision and post-Marxan analysis, followed by sharing results and pursuing ongoing collaborations. In this phase “local uses” information, which refers to Inuit knowledge sources which document human uses of the land and water, is mapped.

The ultimate opportunity for such a process is that the engagement, participation, and results from MPA network planning can help communities and Indigenous organizations plan for coastal and marine stewardship, spatial planning and conservation economies.

Challenges, recommendations, and lessons learned were also discussed and are listed in the following table:

Challenges	Lessons Learned and Recommendations
<ul style="list-style-type: none"> • Indigenous/local involvement throughout the process of MPA network planning • Data gaps • Speaking the same language • Complexity of MPA network planning and design • Lack of regional and local capacity 	<ul style="list-style-type: none"> • Start looking for data earlier • Share project information as often as possible • Provide dedicated resources to Indigenous organizations from multiple sources

DISCUSSION POINTS

- There were concerns around terminology such as how to define “conservation features” and questions around what constitutes a “boundary” and to whom.
- It is important to reach out and make the processes work for the local people who are affected by MPA planning and management.
- The Aichi targets are politically identified aspirational targets but it is important that the protection measures that result from this initiative have ecological meaning and integrity. Ongoing discussion around the amount of protection to be identified needs to occur to ensure meaningful conservation benefits are continued.
- By August 2019 there should be some PAMPAN scenarios resulting from running the Marxan analysis.
- Inclusion of Indigenous knowledge is extremely important for identifying conservation features and needs to be continually taken into account throughout the MPA network planning process.
- The participatory approach to MPA network planning is an integral feature of this process and can include various sources of information which should be reviewed on a regular basis to ensure continuous improvement.
- There is a need to be inclusive of all ways of knowing and sources of information.
- Information is often obtained from Indigenous peoples, but they are not included as partners. There is sometimes apprehension from Indigenous groups approached about getting involved in protection efforts.
- Challenges include addressing data gaps, speaking the same language and supporting the same initiative, capacity for participation and availability.
- It is important to build people into the research and decision making, and to train youth to become the next generation of decision makers and have the power to drive future actions.

SESSION 3: INDIGENOUS/LOCAL INVOLVEMENT IN MPA MANAGEMENT AND MONITORING

HOW SAAMI REPRESENTATION IS ENSURED IN THE MANAGEMENT OF THE LAPONIA WORLD HERITAGE SITE

Åsa Nordin-Jonsson, Director of the Laponia World Heritage Site (Sweden)

OVERVIEW

Laponia is a mixed site for both culture and nature and has been deemed a UNESCO World Heritage site since 1996. It is an important area for Saami, who have lived there for generations. Within the site there are 65,000 reindeer that graze in the summer, and there are also two national parks and a nature reserve within its borders. Laponia represents 83% of the total protected area in Sweden, which is the same size as Cypress. In order to declare the area a world heritage site, UNESCO required recognition of Saami heritage and culture and the seven Saami communities living within the site. This contributed to Sweden's recognition of Saami people.

Currently, the site is managed by a unique organization in Sweden called Laponiatjuottjudus. Work to establish a common management plan and organization started in 2006. Indigenous people are on the board and there is a co-management system in place between the Saami people, the authorities, and the municipalities. In 2011, different stakeholders agreed on terms to manage the site together. Although Laponiatjuottjudus is not a regulatory authority, it manages the world heritage site according to the management plan and is responsible for the maintenance and infrastructure, as well as the knowledge and information of the area. Laponiatjuottjudus' management identified the need to listen to the knowledge of the Elders to be able to manage the site properly.

There are three core values to the site where money is invested: nature, reindeer herding, the Saami culture, and traces of earlier users. Time and money are the limiting factors in southern management—while the Saami have time, the government has specific timelines and deadlines to address. Some of the challenges over the past seven years have been around different interpretations and ideas around what the “new way” forward is. Consensus is difficult to achieve, especially when everything is counted in money and time. Yet, Saami are a majority on the board, so consensus is important for their voices to be heard. There was a proposal to have a rotational chair of the board on a 4-year cycle—alternating between Saami and the state. No agreement has been made to date. With this decision comes concerns around who manages the site and that if the Saami are not leading the process that their voices will disappear. This leaves room for the board to become more adversarial and leaves less room for equality and respect, especially among new staff members who are challenged by new ways of thinking.

Challenges also exist around how to manage different cultural perspectives on the same landscape. This includes different views on the management plan, snowmobile trails, and moose hunting. Different approaches have different impacts on the land. For example, development of more trails means that there might be a loss of reindeer population for harvest and use. Presently there is no full recognition nor integration of Saami culture and knowledge in the management of the site. While there are many challenges, there is also an increasing recognition of the people who are living there and the need to include them in the management. In the end, where Lapponia was once seen as nature and wilderness, today it has become a wholeness of human, nature and culture.

DISCUSSION POINTS

- The management plan includes zoning but it hasn't been agreed to or implemented yet.
- Compared to other parts of Sweden, Lapponia is an exception. It is the only management plan that recognizes Saami on the board and based on Saami culture and knowledge.
- Norway hasn't been able to agree on how to be a part of this and how a national park would affect them, though there is dialogue on the issue.
- Saami previously felt excluded from the national park designation process. There was the question of how to include them in management decisions. This has changed since the 1970s, but many are still opposed to protected areas as they may affect their access to traditional lands and uses of resources (i.e. reindeer).

INUVIALUIT LEADERSHIP IN MARINE PROTECTED AREA PLANNING AND MANAGEMENT

Joe Illasiak, Inuvialuit Game Council & Shannon MacPhee, Fisheries and Oceans Canada

OVERVIEW

The Inuvialuit Final Agreement is a Modern Land Claim that was signed in 1984 and encompasses the western Arctic and its six communities. The Agreement guarantees the rights of Inuvialuit in all decision-making and approaches to resource management. The co-management system was established in the Inuvialuit Settlement Region (ISR). All six communities elect a member to sit on the Hunters and Trappers Committee (HTC) and then each HTC appoints a member from their Board of Directors to form the Inuvialuit Game Council (IGC). The IGC appoints members to the co-management boards and each co-management board involves an equal number of government and Inuvialuit.

There are currently two Oceans Act MPAs in the Arctic. One is Canada's first Arctic MPA (2010): Tarniut Niryutait (TN), and other is the Anguniaqvia niqiqyuam, Canada's second Arctic MPA (2016). The boundary of the three areas which make up the TN MPA are based on traditional harvesting areas within the beluga management plan. It involves MPA monitoring based on a long-term partnership between co-management partners for beluga

harvest and harvest-based monitoring. This MPA aims to conserve and protect beluga whales and other marine species, their habitats, and their supporting ecosystem. The Beaufort Sea Beluga Management Plan is driven by communities and formed the basis of the spatial boundary of the TN MPA. It was the relationships that were built through long-term partnership programs which paved the way for co-development of priorities and research programs between harvesters and government. These partnerships also included building youth capacity through participation in field programs, laboratory work and conference internships in different regions of the country.

Anguniaqvia niqiqyuam is Canada's second Arctic MPA (2016), and the first with a Conservation Objective informed solely by Traditional and Local Knowledge (TLK) as well as by science. The aims of Anguniaqvia niqiqyuam are "to maintain the integrity of the marine environment offshore of the Cape Parry Migratory Bird Sanctuary so that it is productive and allows for higher trophic level feeding," and "to maintain the habitat to support populations of key species (such as beluga whales, Arctic char, and ringed and bearded seals)." The Anguniaqvia niqiqyuam exemplifies community leadership in the development and implementation of research and monitoring programs, which also includes youth capacity building from the beginning to the end of projects.

There are three governance bodies within the ISR: the regional Western Arctic MPA Steering Committee (WAMPA), the Tarium Niryutait MPA Working Group (local), and the Anguniaqvia Niqiqyuam MPA Working Group (local). WAMPA was the original body. However, the need for more local level involvement led to the formation of the two local Working Groups. When establishing the three groups, it was important to take the time to establish the most appropriate governance structures, as well as to shift the balance of power within MPA development and management.

The MPA Working Groups are responsible for co-designing and approving management and monitoring plans, supporting the implementation of approved management and monitoring plans, as well as reviewing Activity Plan applications. They also provide recommendations to the Western Arctic Marine Protected Area Steering Committee for the on-going planning, management, and monitoring of the MPAs. The Working Groups consist of a federal representative, a co-management board representative, and representatives from each community, as well as at least one youth member. Management and monitoring plans are co-designed and approved by the MPA Working Groups and the MPA Steering Committee. Ultimately, when different groups with different skills and knowledge come together, there is a greater opportunity to learn and co-interpret information.

Lessons Learned

- The Inuvialuit Final Agreement establishes the rights of Inuvialuit in decision-making.
- From an Inuvialuit perspective, area-based conservation tools provide enhanced protection for species of cultural and subsistence value – for healthy communities and food security.
- Communities must be engaged at all stages in the MPA management cycle.
- Community-level governance structures are needed.
- Meaningful engagement takes time and requires establishing relationships.
- A "Research economy" must address community priorities and meaningfully include

Inuvialuit.

- Federal conservation initiatives must provide sufficient local capacity to support meaningful participation by Inuvialuit in the MPA life cycle (funding for governance structures, education/training, employment).

DISCUSSION POINTS

- This is the only area where there is no quota and the Indigenous community did not desire a quota system, but a management plan instead.
- It is the longest running beluga monitoring program.
- Community concerns were expressed in Darnley Bay, Paulatuk, around Arctic cruise ships.
- Beluga tagging research is ongoing using telemetry, TEK, aerial surveys, which helps to estimate the number of Beluga whale everyone is learning more together (harpoon design, for example).
- There is a challenge in local capacity to support meaningful participation (in research, consultations, etc.). DFO has created a secretariat to help address this challenge.
- Allowing youth to build a foundation in research can help build tomorrow's leaders.

THE SMARTICE APPLICATION

Shelly Elverum, Ikaarvik Ocean Wise

OVERVIEW

SmartICE was developed through Ikaarvik and has since morphed into a social enterprise. For the people of Nunavut, ice is the platform for life and water is the abnormal state of the ocean. Inuit and local knowledge no longer completely fits with the current context of ice due to climate change. New generations of Inuit under the age of thirty—who make up 60% of the population—have less on the land experience and a lack of knowledge on how to travel safely. Many do not have proper clothing for hunting, do not own a sled, and do not have the money to pay for gas for their snowmobiles. Research from Labrador showed that 1 out of 12 people had an accident by going through the ice, that 2 out of 3 people were scared or uncomfortable about travelling on ice, and about 1 out of 5 people who rely on traditional foods were not about to harvest. In addition, half of people surveyed said they could not use typical hunting and travel routes. In light of these challenges, a partnership with Memorial University researchers was developed to support the creation of salinity monitoring technology which drags behind a sled to monitor the ice thickness.

Therefore, SmartICE was developed. It is a new technology driven by the necessity to monitor ice thickness. The technology is a combination of Indigenous Knowledge and science initiated in Nunatsiavut in 2009-2010.

The community identified routes for monitoring ice thickness and then community members took out SmartQuamatik, a mobile sensor which operates using Wi-Fi and uploads

data to satellites. This provides instant feedback on sea ice thickness. This data can then also be used in collaboration with the interpretation of satellite imagery and GIS mapping. The SmartICE application creates a heightened feeling of security, as people know immediately when and where it's safe to go, ultimately reducing the element of fear when traveling on ice. The data is also shareable with other communities (for example, the use of the SIKU application to share ice information). Ice maps can be printed out and added to the grocery store bulletin boards for people to see, be safe and aware of dangerous areas. It can also be distributed through interfaces like Facebook, phones, and included as downloadable information to save before leaving the community.

SmartBuoy was also developed as a stationary sensor and indicates air, snow, sea ice, and ocean temperatures. Local at-risk youth were trained to build these out of plumbing pipes and trained in how to use them, giving them the heightened experience in the technology sector. SmartICE technology maximizes social impact and creates positive community change and empowers communities to adapt to unpredictable ice. Profit is generated through the use of the maps for ice-based fisheries which are purchased for safety reasons during variable ice conditions. Tourism and search and rescue support also have the potential to provide a profit by purchasing map that allows for safely accessing the end of the polynya and the safety provided through ensuring the integrity of the ice. Search and rescue missions have more than doubled in the last ten years in Nunavut, showing a great need for a technology like SmartICE. The income for the program supports the operators of Quamatik with fuel, equipment, and clothing. The desire is to expand the technology to fresh water (a different technology) and to other communities that are also interested in being included in the program.

DISCUSSION POINTS

- Inuit societal values are based on caring for the environment and community, being innovative and resourceful, sharing. The technology is being shared with several other communities across the Arctic.
- The SmartICE application turned into a terminology project – there are 60 different words used by Inuit to describe the differences in sea ice and these have been recorded for future generations.
- Mining ships can get stuck in ice. Ships spend significant financial resources trying to get out, and SmartICE will have the information to tell them which way to go. Similar solutions can be provided for the landing of planes on the ice. The team is looking at adapting it to unpredictable freshwater ice – especially for northern communities connected by lakes and rivers.
- The app was the winner of a 2017 UN climate solutions award.
- MPAs are about the ice for many communities in the Arctic.

SIKU, THE INUIT KNOWLEDGE WIKI & SOCIAL MAPPING PLATFORM

Gibson Porter, Arctic Eider Society

OVERVIEW

SIKU, the Indigenous Knowledge Social Network, is an online platform and mobile app created by and for Inuit to facilitate self-determination in research, education and environmental stewardship. This mobile application is for observation and data collection when out on the land and allows users to log species sightings. It provides a wide variety of flexible tools and services linked to weather and remote sensing information, sea ice safety and the ability for users to control privacy and intellectual property rights respecting Indigenous knowledge frameworks. It was initially developed by the Arctic Eider Society in collaboration with several communities around Hudson Bay, and has been further improved by beta testers around Nunavut. A compound map is developed that shows satellite data and information entered into the application. There is a feed that shows posts which are geotagged on the map. Communities can add posts or comments to the feeds. The app can also track where you go and tag sea ice types. Hunting trip stories can be shared, including warnings, records of what was caught, what the animals ate, and measurements of ice. The app provides profiles for all the ice and wildlife terms shared in posts, and connects them to their unique Inuktitut terminology. Thus, it also teaches people about language and relationships to the environment such as ice types and harvest protocols.

DISCUSSION POINTS

- Grants, awards (like the Google Impact Challenge) and charitable contributions have maintained this work over the long term.
- The app is not publically available. It is account based. Users must respect each other's intellectual property rights and are legally bound to the terms and conditions to make it a safe space for sharing knowledge.
- There is a linkage to satellite imagery, sea ice roughness and it can identify the tracks from ice breaking events.

To some extent, this app was modeled after Nunavut hunting stories of the day on Facebook, but SIKU is more focused on knowledge sharing. Compared to Facebook, it is also easier to filter and access specific sources of knowledge over time on the platform.

HOW AREA-BASED CONSERVATION MEASURES IN THE BARENTS SEA CONTRIBUTE TO ECOSYSTEM-BASED MANAGEMENT OF NORWEGIAN SEA AREAS

Cecilie von Quillfeldt, Norwegian Polar Institute

OVERVIEW

The presentation covered key areas for biodiversity and management challenges. These include the ecological changes between years, the connection between land and ocean, migration—different pressures in different areas and activity—shipping, petroleum, and changing fishing activity. Within the Barents Sea, eighteen areas have been identified as valuable, with four of those being particularly important. Consultations are conducted with experts on criteria for designation of valuable and vulnerable areas that need special attention and are important for life history and ecosystems; these areas may not be designated as protected areas. Although it is a slow process, a national plan for MPAs is in development. There are, however, already a few areas having a formal MPA status, e.g. several areas around Svalbard.

Norway has developed management plans for all Norwegian oceans areas. The purpose of Integrated Management Plans is to provide a framework for the sustainable use of natural resources and goods derived from the area and at the same time maintain the structure, functioning and productivity of the ecosystems of the area.

Steps in this process include among other things:

- Evaluate conflicting interests
- Make guidelines for activity
- Set levels for acceptable human influence
- Achieve consensus about management
- Identify gaps in knowledge
- Make guidelines for monitoring
- The plans have to go through Norwegian parliament to get approval.

The management process involves updates to the plan every four years, which undergoes a complete revision every twelve years. There are two permanent working groups following up the plans—one manages monitoring and integrated assessments and the other takes charge of valuable and vulnerable areas, ecological objectives, risk assessments etc. There are ongoing consultations with stakeholders, seminars on specific topics, and public meetings as well as written feedback on scientific material and reports being produced before updates take place. The process also includes research, and mapping of activity and habitats. A report on vulnerable and valuable areas was recently released in 2019.

Various frameworks exist for management by area, including mandatory lanes for shipping, protected areas, framework for petroleum activity and other types of geographical regulations, and guidelines for activities such as time and volume limitations and equipment restrictions. It is important to recognize the strong connection between the sea and the land and how energy is transferred from one area to another. Furthermore, a species may use various parts of an area depending on their life cycle stage, which needs to be taken into consideration when managing valuable and vulnerable areas. For example, the varying ways in which some polar bears distribute themselves across the land and live within either a small or larger area.

DISCUSSION POINTS

- The approach to engagement should be to treat everyone equally and ensure public access. The Saami communities have been approached about marine planning, but for reasons that are unclear, there wasn't much response.
- A different approach other than a public meeting may be needed. A public meeting may not be the best approach as if the right people are not included or approached they may not trust the process or the people involved. There is a need to incorporate better approaches to public engagement in order to cover all interests.
- The main challenges are time and money. The time required to build relationships and collaborate may not match the deadlines in place.
- The management plan regulates industry. However, there is a need to find a way to see how local people relate to those management plans. The management plans are for the offshore and areas that local communities aren't using. It's difficult to

get engagement on areas that people aren't using.

- Some local people may feel that they are not part of the process and do not feel like their voices will be heard.
- Management plans have been developed for the long-term and there could have been multiple opportunities for involvement. Time and deadlines are non-negotiable and so if people don't show up to provide input, it isn't possible to go to them. This is more about managing industry, but there are still local people there along the coastline.

SESSION 4: INDIGENOUS/LOCAL GOVERNANCE MODELS

THE PIKIALASORSUAQ COMMISSION RECOMMENDATIONS – CASE STUDY

Stephanie Meakin, Inuit Circumpolar Council – Canada

OVERVIEW

The abundance of marine life in the polynya is significant to biological, economic, social and cultural health of its people. Inuit communities are expressing concerns about food security and environmental integrity in the face of climate change. For example, the North Water polynya hosts significant numbers of narwhal, as well as millions of sea birds. The Inuit requested that this area be protected and to be involved in the management. Continued concerns stem from the likelihood of increasing shipping, tourism, and development in the region. Therefore the opportunity for an unprecedented initiative arose where the Kingdom of Denmark, the Government of Canada, the Nunavut Government, the Government of Greenland and Inuit leaders could work together on an Inuit-led management framework for the area based on centuries of Inuit knowledge and environmentally sustainable practices.

The Pikialasorsuaq Commission was mandated to conduct consultations in communities in Canada and Greenland closely connected to Pikialasorsuaq and to communicate how Inuit communities envision the future of this marine region. The goal is for Inuit-led protection and conservation efforts to protect this unique marine environment for the communities that depend upon its resources and for the globally important ecosystem of the polynya and region.

The Pikialasorsuaq Implementation Committee (PIC) was officially formed in December of 2018 after the Pikialasorsuaq Commission convened consultative meetings with Inuit communities of Canada and Greenland and delivered its report. The PIC is charged with overseeing and implementing the following three recommendations:

- 1) A management regime, Inuit Management Authority (IMA), led by Inuit representatives from communities in Pikialasorsuaq region. This management authority could:
 - Oversee monitoring and research. There is a desire to establish a joint monitoring program between Denmark and Canada.
 - Promote the conservation of living resources

- Elevate the wellbeing of Inuit communities that depend on these resources
- 2) Identify a protected area that encompasses the polynya and a larger management zone that reflects the connection between Inuit communities and the natural resources they rely on.
- The animals that use the polynya are the same ones migrating through the area that support other communities.
 - We cannot put a line around it, as it has a larger cultural zone. The polynya itself is within the red dotted border shown in the map included in the presentation.
- 3) Establish a travel-free zone for Inuit across the Pikiyasorsuaq region.
- Families live on both sides of the polynya and travel between them is circuitous and takes Inuit far south to transit via plane. Historic travel patterns were to cross the ice bridge and avoided regulated travel procedures/policies (i.e. passports and government controlled border crossings). Global Affairs Canada (GAC) is leading the discussions around this issue.
 - The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) also supports this recommendation with Article 25. Canada and Denmark are both signatories and have responsibilities to uphold these rights.

Advancing the recommendations of the Pikiyasorsuaq report is a priority for the Government of Canada:

- Global Affairs Canada has been mandated to explore how to facilitate the mobility of Inuit across the Canada-Greenland border.
- Fisheries and Oceans Canada has direction to advance negotiations with the Government of Greenland and the Kingdom of Denmark on agreement to developing a framework for implementation of the management and conservation objectives of the Commission.

DISCUSSION POINTS

- Possible mechanisms for creating a national marine protected area that is Inuit led include: IPCAs (Indigenous Protected and Conserved Areas), OECMs (Other Effective area-based Conservation Measures), MPAs (Fisheries and Oceans Canada Marine Protected Areas) or NMCA's (Parks Canada's National Marine Conservation Areas). DFO also has direction to work with Denmark and Greenland and negotiate how to best do this.
- The communities are not ready to determine the mechanism – it is a long process.

BERING STRAIT VOICES – KAWERAK'S VISION FOR ACTION TO ADDRESS INCREASED VESSEL TRAFFIC IN THE ALASKAN REGION IN ORDER TO PROTECT THE SUBSISTENCE WAY OF LIFE

Mary David, Kawerak Inc.

OVERVIEW

The Bering Strait region is home to over 10,040 people, most of whom have ancestral ties to the area dating back thousands of years. The area contains 570 miles of coastline that includes all of Norton Sound, and portions of the Bering and Chukchi Seas. The town of Nome is approximately 1/3rd of the region's population and serves as commercial and community hub for the 20 tribes of the Bering Strait region. Four of those tribes live within Nome, while the other sixteen live in surrounding communities.

Based in the community of Nome is Kawerak Inc., whose mission is to advance the capacity of its people and tribes for the benefit of the region. The organization is guided by Yupik and Inupiaq values and traditions that aim to continue to build sustainable capacity to uphold spiritual and cultural traditions and relationships. The mission of Kawerak Inc. is divided up into four main divisions:

1. Education, Employment and Supportive Services
2. Community Services and Transportation
3. Natural Resources
4. Administration and Cultural Programs

The region is currently facing shocking ice condition changes that are impacting Alaska Native people. Ice break up used to begin at the end of May and the beginning of June. However, now the process is beginning in mid-March. When the ice disappears from the area, so do the animals, which ultimately impacts food supply and limits harvesting timelines. Other challenges include increased vessel traffic through the strait. It was reported that there were 40 sources of discharge from the Crystal Serenity cruise ship, including noise. In response to the challenges facing the region, Kawerak, Inc. initiated a variety of local efforts including the development of diverse programs within their Natural Resources Department, establishing a Marine Program and hiring a Marine Advocate, as well as initiating advocacy work on a wide variety of Arctic issues.

In 1978, Kawerak, Inc. formed the Eskimo Walrus Commission (EWC) which represents 19 Alaskan coastal walrus hunting communities from Barrow and Bristol Bay. It is a recognized statewide entity working on resource co-management of walrus on behalf of Alaska natives. As an Alaska Native marine mammal commission and co-management entity, the work of the EWC involves providing information to member communities on the current research, politics, regulations, and issues affecting the Pacific walrus population and subsistence communities. The EWC holds one annual meeting per year with its 19 Commissioners, which provides an opportunity to ensure that the Alaska Native voice is being adequately represented in management processes, receive agency reports, discuss important issues related to walrus, and review proposals for projects. An important role of the EWC is to ensure that scientific and Traditional Knowledge research involving walrus and EWC communities is conducted responsibly, and that both are utilized effectively in management decisions regarding the Pacific walrus population.

Kawerak, Inc. is moving forward with the following next steps:

- Ensure the northern Bering Sea and southern Chukchi Sea are protected from harm while sustaining local business and commerce.
- Oil Spill response planning will be critical moving forward—the risk of a disastrous oil spill has been reiterated throughout all workshops and advocacy efforts.
- Maintain and strengthen the relationship and collaboration with the U.S. Coast Guard.
- A tribal commission is being created to address the needs of communities in the Bering Strait region.

SESSION 5: CONCLUSIONS AND NEXT STEPS

On the third and final morning together, a community member and workshop participant led the group in a prayer to open the breakout discussions and to guide participants home later that day with safe travel and open minds. Open Space Technology, a discussion process that is participant driven and designed to mimic the organic and often productive conversations people have during breaks and lunches, was implemented to structure the breakout sessions. The topics of discussion were generated in situ by workshop participants and identified to address key concepts which have emerged through the workshop discussions and events. In the “marketplace” stage of the process, participants generated ideas for their breakout groups as indicated below. After outlining the topics and creating an agenda for the rest of the morning, participants signed up for the topics they were most interested in learning from and/or contributing to. Following each round, breakout groups presented on their topics and key discussion points relevant to the outcomes of the workshop. The resulting ideas, concerns, questions and advice are included in the summary below; paraphrasing and interpretation are kept to a minimum to accurately reflect the words that were written and spoken. These points are organized under common themes, though indivisible in practice.

Major points highlighted by participants for supporting Indigenous/local involvement in, and Indigenous/local led, marine protection in the circumpolar Arctic Ocean

TIME AND AND SPACE FOR RELATIONSHIP BUILDING

- Meetings and face to face engagement is critical. Not everything that the community wants is published or universally accessible, and that is why we have meetings – to share our perspectives and cultures and different backgrounds, while sharing the same goal to protect our environment.
- Within an established system, how do we recognize the value of taking time to build relationships, and how do we communicate that value to our organizations and influence new priorities to support these kinds of meetings?
- We need TIME (“Tea time”). Take small steps. Building relationships takes time.

- A best practice is to take the time to come to each community being affected by the policy or change and communicate directly.
- Need for higher level support to take time for tea/coffee—shifting the mindset.
- Space to have tea/conversation occurs in a comfortable time/location/style for all participants (not just in an office room). Policy should not only be made behind a desk. People on the ground need to be developing policy recommendations and developing methodology that can lead to policy.
- We must drink coffee and discuss and ask what we want to achieve. Sharing coffee is one of the best ways to build relationships, which take time to develop. We want to share free coffee to create safe space and create opportunity for input into work. People will tell you stories and more information about how important the space is for them compared to if you stay behind your desk or public host a meeting. There is a need to build a relationship first.
- Just get to know each other without an agenda.
- Start an agenda with time to meet and create a bond. This is more efficient and cost effective and offers higher benefits in the long run.
- When you click with someone from a community, how do you perpetuate, maintain, and prolong connections over space and time?
- How do we build in that coffee/relationship building time? How do we place value (money) on the time it takes to develop those relationships and recognize those as essential? This is a major challenge to put into budgets. How do we show that this is a worthwhile thing to do? How do we show that engagement and the development of trust is a key and essential step in any project?

BRIDGE-BUILDING (LOCAL-INTERNATIONAL, POLICY-COMMUNITY)

- Bridges have to go both ways, and benefit both sides.
- For too long this bridge has only been going in one direction.
- Need time and space to create the bridge. A comfort level is needed to find out where your common passions are and where the relevance to both sides exists.
- We need to repair the disconnect between policy-makers and the community.
- Meaningful engagement needs to occur from the local level to the international level and vice versa. There is a science-based disconnect between the local and the international level. Do we have the structures in place for this two way bridge?
- We need to integrate local knowledge and needs with policy solutions across the circumpolar Arctic.
- Many researchers have written many papers about how to engage with northerners, but no northerners are co-authors. It's still not fully integrated.
- A results driven agenda is not bearing fruit. Communities must know and be involved in the processes.
- There is a disconnect with language. We need a cultural translator to assist with the communication process.
- We can scale-up processes and take them from local to global.

- There is a need for champions who have both the knowledge of the two worlds and the ability to scale up.
- Co-producing material, such as protocols and knowledge is much more effective. How can we implement the co-production of MPA design, management, etc.?
- How do we cultivate and formalize the people/champions that are doing this “bridging”?
- At the moment there is an onus on Indigenous peoples to learn about policy. What about having policy makers learn about Indigenous/Traditional Knowledge?
- How can one have remote tea/coffee time? Use social media to connect and build relationships.
- The role of bridging is improved if you can rely on people who have a “leg” in both worlds—the policy and the science or two ways of knowing. It is much harder if you only stand in one world. Same with multiple layers of government. It’s about knowing where the opportunities arise and how we can accelerate understanding. It requires bridging individuals who understand the opportunities and can make the moves to make things happen. Let’s make informal governance models work and try to give it a meaning by leading through example.

COMMUNICATION ACROSS LANGUAGE, CULTURE, WAYS OF KNOWING, MEDIUMS AND TIME

- Definitions are important for developing a common understanding.
- How do we define a “boundary” when both sides of a boundary are important, depending on who you are speaking with?
- Awareness of the language/word choices is need to communicate concepts like “Protection” or “Conservation Area” as that could be interpreted as loss of harvest rights.
- We can be talking about the same things, but with a disconnect in language.
- Could have a cultural translator function.
- Action is more important than what it is called.
- We must recognize that not every community is the same—each one has different concerns, values and cultural practices (i.e. silence in response to a question does not imply agreement). When you have visited one community, you have visited one community. Different communities have different ways of doing things. One size does not fit all. The issues need to be put in context.
- Published information can be used as a tool (in different dialects).
- Capacity and distance between layers affects the ability to engage in communication/
- Recognize that not all knowledge exists in written form.
- Where is information stored? Workshop results should be published so that other people can use/access the information, including in schools and heritage societies, so that the next generation can see what was started and to continue it.

- It is important to gather and document knowledge while elders and knowledge holders are still able to share, including documenting language to keep it alive; now is a critical time.
- Bridge the gap between generations.
- The communication process should be ongoing, from beginning, middle and end; including coming in and reporting back, for research and also policy. Should be presented as “this is what we recommend and how it may impact you.” This promotes transparency and accountability.

CAPACITY

- There needs to be a system in place where locals can also work with the issues and where there are resources for the community to be involved (i.e. budget allocation).
- Building resilience empowers people, but it also puts responsibility and onus on those who are least empowered and resourced to resolve the problems.
- Ensure capacity exists to participate meaningfully, including travel support to be present and share.
- Build capacity of relevant organizations and institutions to take leadership and get states on board (ICC, Kawerak).
- Empower communities to discuss issues among themselves.
- A local economy leads to self-determination and independence.

BALANCE OF POWER

- Maintain awareness of using power and power relations.
- Need to put the people in the Arctic first when it comes to discussion of impacts of climate change.
- The challenge is that it is hard to be heard at the governmental and political level.
- Indigenous issues are never important enough.
- Recognize the power of local observations.

TRUST AND RESPECT

- There needs to be a high importance placed on trust and respect. Find an individual connection, be human. Building trust has added benefits to all.
- Engagement in the management of protected areas requires trust and respect of the Indigenous Peoples and communities involved.
- Elders need to trust those who come into the community to explain the processes properly.
- Build respect through trust, not fear.
- Continue to use international pressure as necessary (such as in the examples of UNESCO and the Laponia site). Trust at the international level means big strides for local communities.

- Consider the role of a champion to help find the connections and make introductions; comfortable knocking on the door and walking in.
- Include the ceremony of relationship building.

PARTICIPATION OF YOUNG PEOPLE AND STUDENTS

- Create a teen app for connecting across regions as an opportunity to combine work and knowledge of Northern communities with Southern regions of Canada.
- Consider a post card exchange or “pen pal app” for young people.
- Never be embarrassed to communicate.
- This can be a way to help grad students prepare for their work.
- We need to provide guidance to young researchers who may have to move out of their comfort zone to take on new research and training opportunities.

GAPS AND OPPORTUNITIES

- **Tool for the toolbox:** The workshop participants saw a need for a code of conduct/guidelines/principles for policy or research that is relevant to community engagement. The toolbox should include community communication products.
- List all best practices and different ways of integrating IK and science for better decision-making.
- Analyze gaps and opportunities.
- Identify ways to ensure that there is public and community awareness of PAME products. They need to reach a broader audience.
- There is a need and an importance in continuing this conversation and not allowing it finish. Instead of ending this report with a period, we will finish it with an ellipsis...

CONCLUSIONS OF WORKSHOP, THOUGHTS AND NEXT STEPS (SUMMARY DEVELOPED BY *FISHERIES AND OCEANS CANADA*)

- Recognized the value in discussion, respect and relationship building without agenda.
- Indigenous and local knowledge needs to be incorporated right from the conception of the project or initiative and included throughout.
 - It cannot be included meaningfully as an afterthought or as a token input.
 - Recognition that pan-Arctic communities are dynamic, unique and adaptable. There is not a “one size fits all” approach to building relationships or developing trust to support knowledge exchange. Ongoing learning and communication with individual communities is critical to support meaningful engagement.
 - Decisions about local level management or policies need to be made in conjunction with the individuals who are affected by the decisions.
 - Indigenous leaders don’t want to be part of the discussion, they want to lead the discussion and inform the types of research to be done, where and when

- to conduct the research etc. Respect for both science and TLK to develop.
- A shift needs to happen at senior levels of management to support time spent building relationships and sharing knowledge rather than just focus on “productivity” or being results driven. These relationships promote productivity downstream if/when management invests in the process.
 - Inclusion of TLK can be from both the bottom up, and also the top down.
 - International community can emphasize that this is a requirement for working together and must be incorporated (i.e. Laponia: World heritage status required acknowledgement of Saami heritage and culture prior to designation).
 - Relationships need to be built without agenda or for a purpose, for the sake of relationships in general, not in connection to specific projects.
 - It is helpful when they already exist when initiatives need to be developed.
 - This needs to be included as part of the funding proposal/application cycle for research initiatives so that projects can be created in partnership prior to seeking funds.
 - It is recognized that to enable meaningful engagement first requires capacity being built to support communities and organizations to be able to participate.
 - This cost must be addressed in project budgets and does not leave all the responsibility for action/participation on the individuals.
 - The ability to scale up discussions and initiatives from local to international levels is challenging.
 - A need exists for bridging champions, individuals with a foot in each world (traditional and/or local knowledge models as well as management/science/policy knowledge) to help communicate.
 - The MPA tool box may be helpful. Guidance may be developed to formalize key components of “bridging” concept, may include development of community engagement “best practices”, ethical use of traditional knowledge models, development of ethical space where participants are equally comfortable.
 - Further workshops to develop these products will be required.
 - Communication is key for sharing knowledge of international discussions (i.e. Arctic Council) to local levels.
 - Individuals don’t know what they don’t know so it’s not possible to seek it out if the awareness isn’t there.
 - Better, and earlier, communication is needed to promote meaningful engagement, multiple styles of communication of initiatives, role of bridging champions (above).
 - Link to work of Meaningful Engagement of Indigenous Peoples and Communities in Marine Activities (MEMA) expert group for best practices,

forum for discussion, and existing platforms for sharing.

- The PAME MPA Expert Working Group is developing a factsheet summarizing how living conditions of indigenous people are changing and will change due to climate change. A link could also be made to this work.

THERE IS A NEED TO CONTINUE THIS CONVERSATION GOING FORWARD.

INSTEAD OF ENDING THIS REPORT WITH A PERIOD, WE WILL FINISH IT WITH ...



Participant List

Cecilie	von Quillfeldt	Norwegian Polar Institute
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Martin	Sommerkorn	WWF Arctic Programme
Janne	Flora	University of Aarhus (remote)
Candace	Nachman	NOAA Fisheries
Gunn-Britt	Retter	Saami Council
Beaska	Niillas	Saami Council
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Bethany	Schroeder	Fisheries and Oceans Canada
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Lauren	Divine	Aleut International Association
Joe	Illasiak	Inuvialuit Game Council
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Sarah	Rosengard	University of British Columbia
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Jennifer	Sokol	Polar Knowledge Canada
Richard	Ekpakohak	Community member, Cambridge Bay
Alexandra	Anaviapik	Ikaarvik/Ocean Wise

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