2nd International Science and Policy Conference on Implementation of the Ecosystem Approach to Management (EA) in the Arctic

Integrating information at different scales in the framework of EA implementation

Bergen, 25-27 June 2019

ARCTIC COUNCIL

PAME
Protection of the Arctic Marine Environment

CAFF

Sustainable Development Working Group

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https://pame.is/index.php/projects/ecosystem-approach/ea-conferences/second-ea-international-conference-2019

Goal

EA Framework: **(EBM)**

- Identify
- Describe
- Ecological objectives
- Integrated Ecosystem Assessment **(IA)**
- Valuation
- Management actions

- **Increased awareness of the scale issue**
- **Start a conversation on “Ecosystem Approach to Management (EA)” and sustainable use**

1: Integrated ecosystem assessment (IA)

A diversity of approaches and methods used in doing IA

1) E. Eriksen
2) P. Arneberg
3) T. Christiansen
4) A. Niemi
5) J. Grebmeier, Sue Moore
6) L. Eisner

Related themes:

- Underwater noise (S. Moore)
- Conceptual models (J. Rosellon-Druker)
- Scales (B. Husson)
- Integrating the Scales of Interest in Different Knowledge Systems (F. Wickson)

Discussion

*"important to understand all the parts of the **ecosystem puzzle**"*

Need more focus on **subsistence** and not only commercial use

Need to face a socio-economic challenge of "higher **value**" for commercial fisheries (serves more people) and lower for subsistence (serves fewer people)

Need to look into good examples of how **Indigenous** have successfully participated in IA

*"Goods and services for future generations is rooted in **conservation**"*

Need to look into the value of **"non-use"** of ecosystems and resources

Focus on more **holistic** definitions

Need to discuss **ecological objectives**

2: MPA´s and other special areas

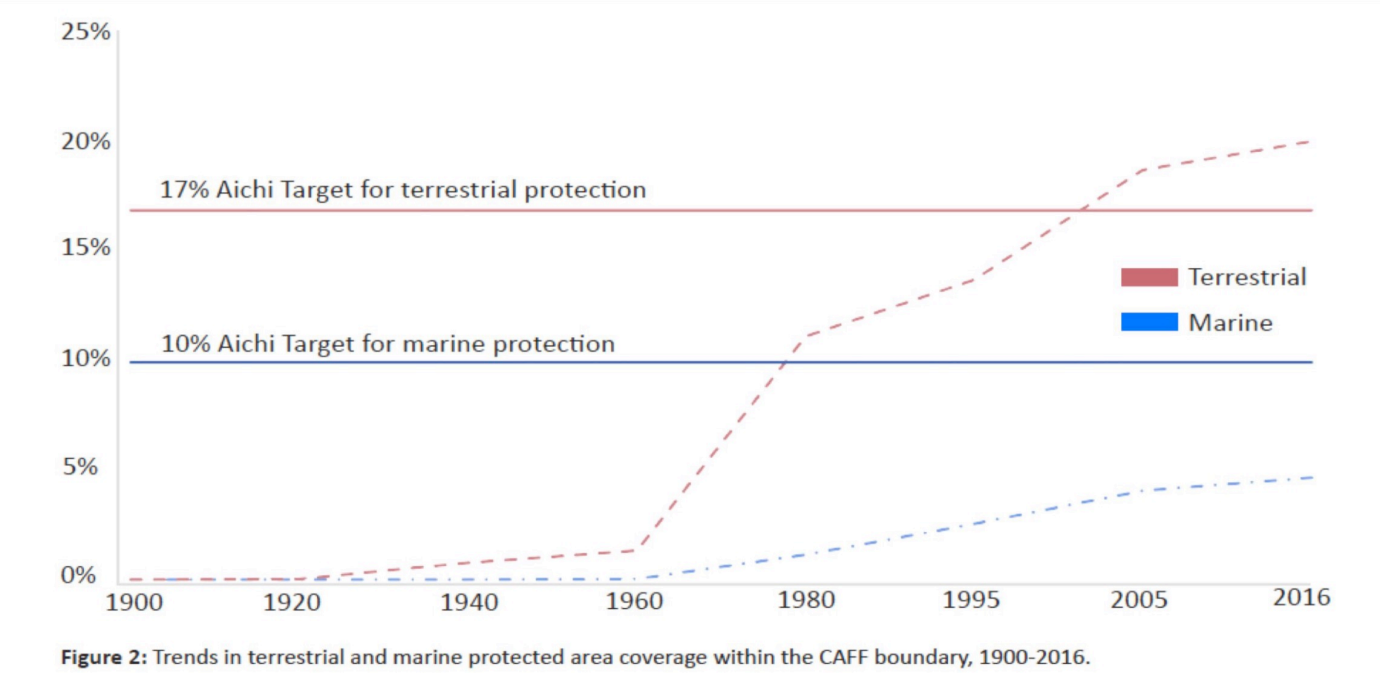


Figure 2: Trends in terrestrial and marine protected area coverage within the CAFF boundary, 1900-2016.

Lauren Wenzel (MPA Expert Group in PAME)

X_1 Closures (L. Jørgensen)
X_2 MPAs (L. Wenzel)
X_3 PACs (M. Giangioppi)
X_4 SCP (B. Solovyev)

Related themes:

- Implementing EA in Marine Spatial Planning (G. Janssen)
- The Pan-Arctic Marine Protected Area Network (M. Sommerkorn)
- Time and cost efficient Long Term Monitoring (L. Logerwell)

Discussion

*"if you don't protect some sites, nature will deteriorate and **provide fewer services**"*

We need to listen to and figure out **what the management need** when building tools and models

Include "ordinary nature"

Because environmental changes occur faster than policy reaction - we need **dynamic tools** to support a **dynamic management**

Because we struggle to get indigenous cultural values and ethics included in Marine Spatial Planning (MSP)

we need to

engage indigenous communities and the government from the beginning and throughout and the process

Bering Sea Elders Group

3: Voices from the north

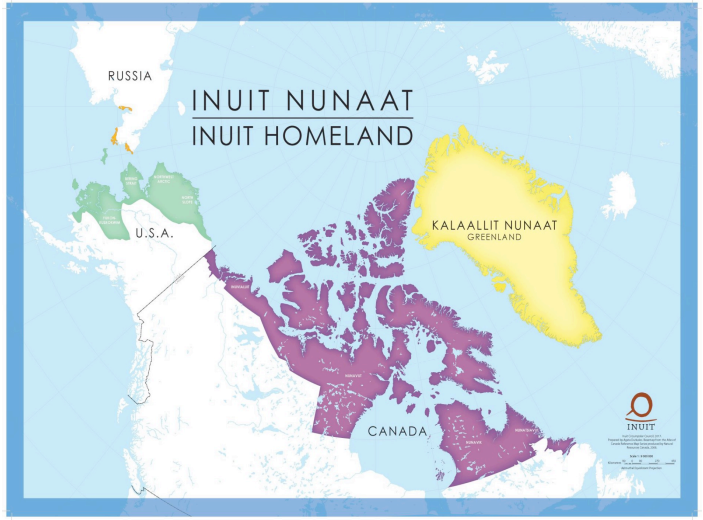
A conversation about people, nature, and sustainability

FJMC
FISHERIES JOINT MANAGEMENT COMMITTEE

Respect for Nature, **Local input** into management of subsistence-use resources, **Food Security** (Nicole Kanayurak, Alaska)

One voice, Protecting marine and coastal food security, **Self-determination** in the management of natural resources and habitat (Bering Sea Elders Group, Alaska)

Bring together community members and resource users with: scientists, biologists, government managers, industry, non governmental agencies to **address common issues**. Management tool = Co-management, **sharing power and responsibilities** between governments and local resource users (Alan Kennedy, Canada)



GUARDIANS OF TARIUQ

Discussion (3 questions)

1) How can Indigenous Knowledge (IK) and science knowledge come together to inform management?

"To face the future we need **two knowledge systems:** native *survival* and scientist *research*"

We need to develop another type of "**common currency"** because subsistence resources do not have the traditional monetary value.

We must build trust by …

Respect, Listen, Acceptance of other ways of knowing, Acknowledging in publications, Meaningful involvement (Meaningful Engagement of Indigenous Peoples and Communities in Marine Activities (MEMA) Part II Report.)

Communication ***in person***, at local venues, from the scoping process and throughout a project.

Use same individuals to meet repeatedly to discover together and **bond/trust** through experience.

Local people to become **advocates** for projects and communicate the issues to their fellow community members.

Moore and Hauser, 2019 = example of **successful** sharing of understanding and coming together

2) How to manage in a holistic way?

Indigenous Knowledge and Scientific Knowledge should have **equal weight**.

This requires **mutual objectives**.

Local residents to be a part of the **decision making** (management).

To start at the **local level** and then go **upward** – not a downward approach

3) How do we minimize the gap between "science" language and "Local Traditional Knowledge" language?

Use plain language knowing that there are differences in language, in dialects, and in interpretations

All the value systems (including the Management itself) have to participate around the table

4: National EA (EBM) implementation

1) NMP (C. von Quillfeldt)
2) SEA (D. van Vliet)
3) IEA (L. Logerwell)
4) EA (B. Solovyev)
5) EA (A. Mosbeck)

Related themes:

- Perspectives from fishers and hunters in Greenland (B. Lyberth)
- Inuit-led Marine Monitoring in Nunavut, Canada (D. Taukie)
- Model for Meaningful Engagement of Indigenous
- Peoples (G. Retter)
- Identifying relevant spatial scales and priorities for ecosystem-based management (M. Karnausk)

Discussion

Norway´s **Management Plans** (NMP) was able to move forward quickly because of a **simple system**. The NMP includes international conventions, which could be even more strongly included.

Greenland scientists and local people identify valid “important areas” and data-gathering, but **ministries don’t understand** the EA concept, and how to cooperate, and EA has not a high priority.

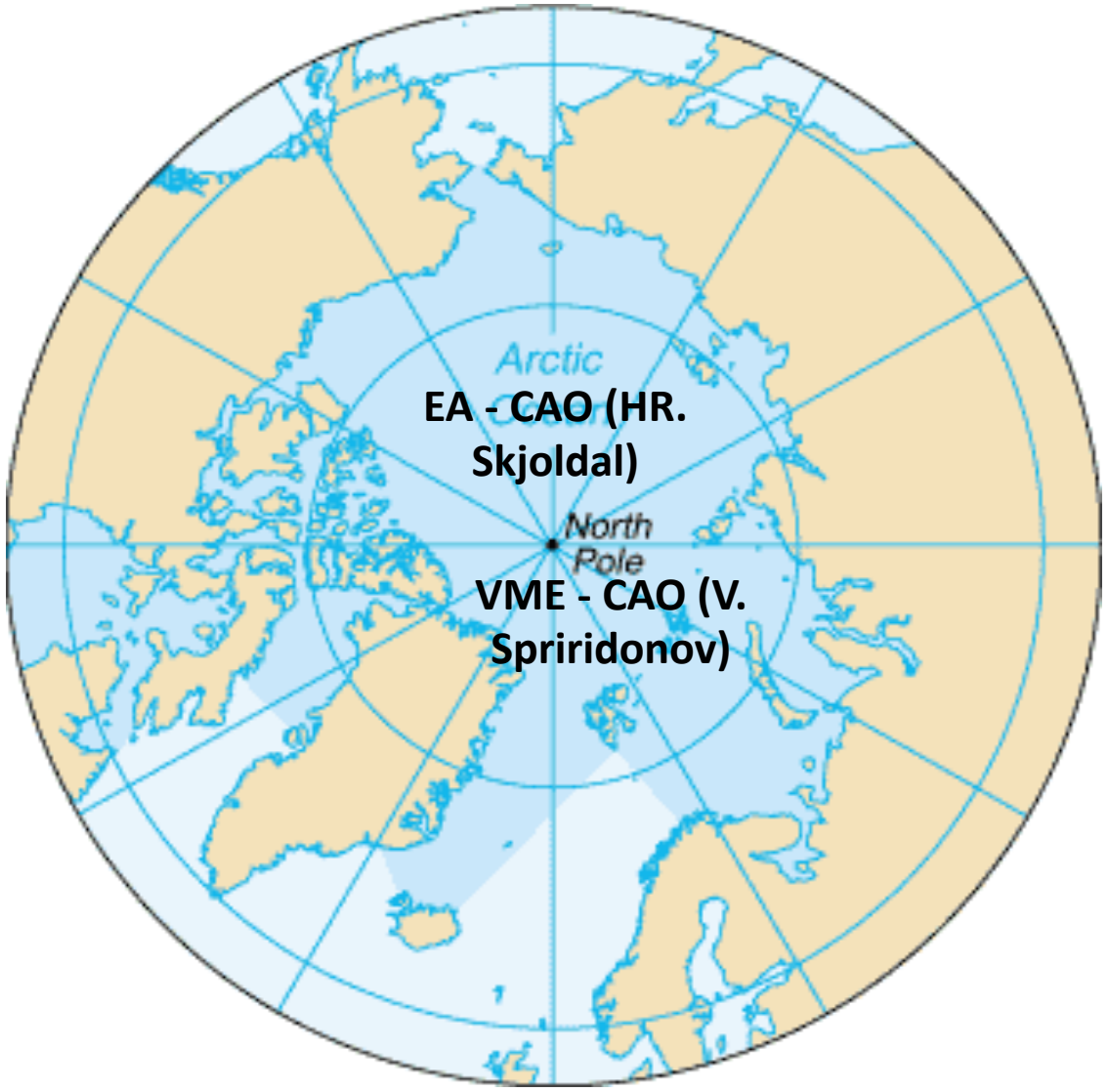
Canada changed their “impact assessment law”. Challenging because of a **complex system** of many regulatory layers are involved.

Alaska seeks **better** research and EA approach, **uncomplicated** flow of data, **streamline** of communication, **sharing** of Inuit knowledge.

Need for institutional renewal because space and time **scales** increase fragmentation and have impact on laws.

Need of **training** programs of “meaningful engagement” - to be applied across working groups of the Arctic Council (PAME).

5: Central arctic ocean (CAO)



Related themes:

Synoptic Survey (A. Olsen)

Organizing science (AH. Hoel, HR. Skjoldal)

Discussion:
Communication with management is important.
Still likely no fishable fisheries in the CAO.

Keywords to a “conference conclusion”

Integrating information at different scales in the framework of EA implementation

- Recognize the **complexity** of the **dynamic** and everchanging ecosystem, without loosing focus
- **Respect** and have **meaningful involvement** (MEMA)
- Move from slow-static to a fast-dynamic **adaptive** management regimes.
- Find the balance between conservation, subsistence and exploitation

[2nd EA Conference website]

https://pame.is/index.php/projects/ecosystem-approach/ea-conferences/second-ea-international-conference-2019

WS. 2018, Seattle, USA

Alaskan Inuit Food Security Conceptual Framework: How to Assess the Arctic from an Inuit Perspective.