**PAME II-2018: Agenda 8.4**

DISCUSSION DRAFT PROSPECTUS September 18, 2018

# Second International Science and Policy Conference on Implementation of the Ecosystem Approach to Management in the Arctic

## Title: The Ecosystem Approach to Management of Arctic Marine Ecosystems: Integrating information at different scales in the framework of EA implementation

## Potential venue: Bergen, Norway (TBD)

## Time frame: May-June 2019

## Potential Co-convenors: Arctic Council, PAME, AMAP, CAFF, SDWG, ICES and PICES (WGICA)

**Summary.** The Ecosystem Approach to Management (EA) is a widely adopted management principle that requires integrated management across sectors of human activities to achieve sustainable use of natural resources while maintaining the integrity of the ecosystem. The EA approach has been acknowledged, defined and adopted by the Arctic states working under the Arctic Council. In 2013 (Kiruna Declaration), the Arctic Council agreed that there was a need for periodic reviews of EA implementation in the Arctic to exchange information on integrated assessment and management experiences. A first international conference was held in Fairbanks, Alaska, in August 2016 to review status of EA implementation. A second conference is now planned for early summer 2019.

Large Marine Ecosystems (LMEs) have been recognized as appropriate scale and units to apply the EA to management of the Arctic marine and coastal environment, with due recognition of their open boundaries and the need to integrate information and management across different scales within and beyond an LME. The second conference to review EA implementation in the Arctic will focus on the scale integration issue.

Integration across scales should be done in an orderly fashion while retaining the focus on the integrity of the ecosystem at the larger LME scale. For example, ecosystem features important to Arctic communities occur at scales smaller than the LME, such as whaling and fishing areas. Pan-Arctic oceanographic processes and fluxes of water and organisms across LME boundaries (e.g. seasonal migrations of birds and mammals) mean that scales larger than the LME also should be taken into consideration. Scale integration in the context of EA implementation applies equally to the natural and social sciences (including TLK) that provide the knowledge base for decisions (e.g. through Integrated Ecosystem Assessment), and the management structures and processes where management decisions are made.

The conference will bring together experts and practitioners to examine how to integrate information at different scales in the framework of EA implementation. Of particular interest is the integration of smaller, local scales into the large-scale framework of EA. Topics to be addressed include areas of heightened ecological and cultural significance (e.g. EBSAs); Marine Protected Areas (MPAs); local co-management arrangements; Traditional and Indigenous Ecological Knowledge; community monitoring; and other aspects as developed by a conference planning group. While the focus is on EA implementation in the Arctic, the topic of scale integration is general and universal. We therefore welcome participation by experts who can share relevant information and experiences from applying the EA also outside the Arctic.

**Outcomes and Products:** Presentations and papers at the conference will review information, knowledge and management practices of Arctic ecosystems at small, sub-LME, scales. Discussions will center on how to integrate these small-scale elements into the LME-scale EA Framework. The conference will also provide relevant information to construct the next generation of EA Guidelines that will address EA activities at smaller scales.

**Meeting Concepts:** A planning group will be established with representatives of co-conveners and others who will develop the program, identify and invite speakers, arrange for editing and publication of the proceedings, solicit sponsors, and provide for other operational details of the conference.

The format of the conference will be a series of plenaries featuring a mixture of invited and contributed presentations targeted at a general audience, followed by discussion. Other venues may include an evening poster session in conjunction with a reception. Meetings of specialists may be scheduled prior to, or after, the plenaries, or in breakout sessions at times that do not conflict with the plenaries. The outcome of the meeting is envisioned to be a conference proceeding of the scientific contributions and a conference report with session summaries, findings and recommendations to aid further development and implementation of the EA in the Arctic.

**Background**

Working groups of the Arctic Council have been engaged for more than a decade in developing aspects of the scientific, policy and indigenous foundations of the knowledge that enable the implementation of the ecosystem approach. PAME established an EA expert group (EA-EG) in 2007 that was broadened in 2011 as a joint group with participation also of other Arctic Council working groups (AMAP, CAFF, and SDWG).

The EA-EG has developed a framework for implementing the EA to management of marine (and coastal) ecosystems in the Arctic. This framework has 6 elements:

1) Identify the geographic extent of the ecosystem;
2) Describe the biological and physical components and processes of the ecosystem,
3) Set ecological objectives that define sustainability of the ecosystem,
4) Assess the current state of the ecosystem (Integrated Ecosystem Assessment),
5) Value the cultural, social and economic goods produced by the ecosystem,
6) Manage human activities to sustain the ecosystem.

This framework has been agreed as a basis for the work by the Arctic Council to support the implementation of the EA in the Arctic. The framework is currently conceptualized at the scale of 18 Arctic Large Marine Ecosystems (LMEs). The LMEs are identified based on ecological criteria and are meant to be geographical management units for applying the EA. The 6-element Framework is the basis for development of guidelines for implementing the Ecosystem Approach to management of Arctic marine ecosystems to be completed in spring 2019.