Arctic Council and Ecosystem Approach to Management: Integrating Ecosystem Service Science into Guidelines

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PICES Annual Meeting, Yokohama
October 30, 2018
Arctic Council

A high level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic Indigenous communities and other Arctic inhabitants...

READ MORE

Finnish Chairmanship
Learn more about the 2017-2019 Finnish Chairmanship of the Arctic Council.

Fairbanks Declaration
Read the Arctic Council's guiding document for 2017-2019, signed at the 2017 Fairbanks Ministerial.

Working Groups
Learn about the six Arctic Council Working Groups, which produce results and solutions through consensus.

Media Resources
Visit the Press Room for press releases, photos, contact information, and more.
The concept of the Ecosystem Approach to management (EA) has been around for at least 30 years and has been extensively discussed, elaborated and developed. This approach is known by a number of different names: ecosystem-based management (EBM), ecosystem approach to management (EAM), or simply the ecosystem approach, EA, which is the term used here.

The EA was adopted as an overarching principle and approach by Arctic Council Ministers in 2004 as part of the Arctic Marine Strategic Plan (AMSP) and described in the following manner:

“An integrated ecosystem-based management approach requires that development activities be coordinated in a way that minimizes their impact on the environment and integrates thinking across environmental, socioeconomic, political and sectoral realms. The management of resource activities needs to be focused on realistic, practical steps that are directed toward reducing environmental damage, protecting biodiversity and promoting the health and prosperity of local communities. For such an approach to be successful, the relevant ecosystems need to be better understood, monitored and reported on. Actions must be based on clear objectives and a sound management structure, employing best available knowledge and practices, integrated decision-making and, where appropriate, a coordinated, regional approach.”

EA Documents and Reports
PAME regularly publishes EA documents and reports. Click here to access PAME’s EA documents.
What is the Ecosystem Approach?

Arctic Council Ministers (Kiruna Declaration, 2013): Comprehensive, integrated management of human activities based on best available scientific and traditional knowledge about the ecosystem and its dynamics, in order to identify and take action on influences that are critical to the health of ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity.
Ecosystem Approach Expert Group (EA-EG)

- Formed in 2007
- Current chairs: Hein Rune Skjoldal (Norway) and Libby Logerwell (USA)

Goals
- Integration of EA implementation into work of the Arctic Council
- Facilitate exchange and review of information and experiences
- Support development of a common and coordinated approach to EA implementation by Arctic states
Stakeholder interactions

- 8 Arctic Council States
- Permanent Participants
  - Aleut International Association (AIA)
  - Arctic Athabaskan Council (AAC)
  - Gwich'in Council International (GCI)
  - Inuit Circumpolar Council (ICC)
  - Russian Association of Indigenous Peoples of the North (RAIPON)
  - Saami Council (SC)
- Observers
  - Non-Arctic States
  - Intergovernmental and Inter-Parliamentary Organizations
  - Non-Governmental Organizations
Ecosystem Approach (EA) Workshops

- 2011 1st Workshop, Tromsø, LME boundaries
- 2012 2nd Workshop, Stockholm, EA framework
- 2013 3rd Workshop, Reykjavik, Data issues
- 2014 4th Workshop, Vancouver, Beaufort Sea LME
- 2015 5th Workshop, Bergen, Setting Ecological Objectives
- 2017 6th Workshop, Seattle, Ecosystem Approach Guidelines
Workshop reports

ICES Workshops 2018
9-11th of May, 2018
Seattle, USA
DOWNLOAD

26-27th of May, 2015
Bergen, Norway
DOWNLOAD

Implementing Recommendations for Ecosystem-Based Management in the Arctic
1. December, 2014
Trondheim, Norway
DOWNLOAD

June 16-18, 2014
Vancouver, Canada
DOWNLOAD PDF

3rd Ecosystem to Approach to Management Workshop Report.
June 10-11, 2013
Reykjavik, Iceland
DOWNLOAD PDF

March 22-23, 2012
Stockholm, Sweden
DOWNLOAD PDF
Guidelines for Implementing an Ecosystem Approach (EA) to Management of Arctic Marine Ecosystems

- Arctic Council Ministers have recognized the need for practical guidelines for EA implementation in the Arctic
- Assist scientists, policy-makers, managers and communities in implementing an ecosystem approach for Arctic marine ecosystems
EA Guidelines – General points

- Arctic peoples’ knowledge (indigenous, local, traditional) is essential to all aspects of EA
- Communication, participation and inclusivity are important
- Implementation of EA is a dynamic and ongoing process (monitor, evaluate and adapt)
# EA Framework

## Possible Methodology for Applying EA

### FUNDAMENTAL

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<th>IDENTIFY</th>
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### OPERATIONAL

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### MANAGEMENT

| MANAGE | human activities |
Identify

- Large Marine Ecosystems (LMEs) define geographic scale and boundaries for EA

Describe

- What are the key characteristics of the ecosystem?
- How are they connected into a functional unit?
Ecological objectives

- Reflect ecological features and be related to the impacts of human activities
- Linked to management, social and cultural objectives

Value

- Cultural, social and economic goods and services produced by the ecosystem
- Include indigenous peoples and local communities in the process of valuation
- Non-monetary/non-market values are important (e.g., social, cultural)
Assess

- Integrated Ecosystem Assessment (IEA)
- Assessment of the status and trends in all relevant ecosystem components
Manage

- Provide updated information on the changes that are taking place in the ecosystem, thereby allowing adaptive adjustment of management decisions and actions, in accordance with new conditions
Value – Discussion questions

- How to include indigenous peoples and local communities?
  - Community workshops to develop conceptual models
  - Other ideas?

- How to assess non-monetary/non-market values?
  - Revealed and/or stated preference methods
  - Other ideas?

- Are some features of the ecosystem non-negotiable (e.g., irreplaceable, irreversible, essential to human culture)?

- Value only key ecosystem goods and services that hold large value and/or affect management decisions?
Upcoming Arctic Council Ecosystem Approach Events

- 2\textsuperscript{nd} International Ecosystem Approach Conference
  - “The Ecosystem Approach to Management of Arctic Marine Ecosystems: Integrating information at different scales in the framework of EA implementation”
  - May-June 2019, Bergen Norway

- 7\textsuperscript{th} Ecosystem Approach Workshop
  - 2020, date and location TBD
  - Topic: value and valuation