

## **PAME I-2020: Agenda item 8.1(b)**

### **Report on status of developing and setting ecological objectives in Arctic marine ecosystems**

**DRAFT Outline version 2 January 2020 - Prepared by EA-EG co-leads**

#### **Background from PAME 2019-2021 Work Plan:**

The objective is to continue to integrate the ecosystem approach into assessments and management recommendations through follow-up to the 2013 EBM marine-related recommendations, taking into account previous work on Large Marine Ecosystems (LMEs), and new and ongoing EA activities of cross-cutting nature.

Report on developments in defining or setting ecological quality objectives in the context of EA implementation in national and international processes.

Project leads: USA, Norway in close collaboration with the EA expert group

#### **Action Requested by PAME I-2020:**

PAME is invited to review and provide comments to this draft.

## **Background**

Setting ecological objectives is one of the six elements of the framework for implementing the Ecosystem Approach to management (EA) in the Arctic, which has been agreed by Arctic Council ministers. The joint EA expert group (administered by PAME) was tasked to prepare a report on development in defining or setting Ecological Objectives in the Arctic as part of the 2019-2021 work plan. At PAME II-2019 in Reykjavik (September 2019), it was agreed that a draft outline would be prepared by the EA co-leads (by 15 December) as a basis for drafting the report in 2020. The plan is to prepare a final draft for approval by PAME I-2021 as a potential deliverable to the 2021 Ministerial.

The report is envisioned with two main parts: concepts related to ecological objectives, and experiences gained from practical application of ecological objectives.

## **DRAFT outline**

### **Preface/Background**

- Why we are preparing this report
- Intended purpose

### **Introduction**

- Introductory remarks on the importance of ecological objectives
- They represent the sustainability part of the EA

- The issue is complex, and setting a coherent, comprehensive, and sufficiently broad and complete set of objectives is challenging (but not impossible)
- Point to some examples of ecological objectives, e.g. EU Marine Strategy Framework Directive (MSFD)

### ***Part 1 – Concepts, terminology and definitions***

Goal, objective, target – some reflection on basic terminology

Ecological objectives

- Clarify what is meant in the EA context
- Is there a definition? Prepare or adopt one.

Ecological objectives versus Ecological Quality Objectives

- Ecological Quality (EQ) is a holistic concept similar to ‘environmental status’
- Ecological quality objectives (EcoQOs) should form a set to be consistent with the holistic nature of EQ

Types of ecological objectives

- Objectives for harvested species (minimum population level, safeguard reproductive potential, rebuilding)
- Objectives for threatened species (improve conservation status, remove threats, improve habitat conditions, rebuilding)
- Objectives for habitats (establishment of protected areas, percentage protected areas, habitat conditions)
- Objectives for environmental quality (no eutrophication, environmental standards for contaminants and water quality, food safety standards)

Hierarchy of ecological objectives

- From general to specific objectives
- From political ambitions to operational standards
- From words to numbers

Ecological objectives versus management objectives

- Ecological objectives are management objectives
- Ecological objectives may have to be translated into operational management objectives
- Management objectives are more than ecological objectives (economic, social, cultural, political)

Ecological objectives in environmental legislation

- Types of legislation (nature protection, biodiversity conservation, pollution prevention)

Role of indicators

- Concept and definitions
- Indicator frameworks (DPSIR)
- Targets

#### Reference values

- Reference to help evaluate current situation
- Ways to establish reference (historical, pristine, no/low impact, other systems)

#### Natural variability

- Ecosystems are dynamic and changing
- Ecosystem baselines are not static
- Poses a challenge when setting objectives

### ***Part 2 – Experiences from practical applications***

#### Introductory overview of developments and use of ecological objectives

##### International level – UN

- UNEP – are there any reports on this topic? On-going work? CBD, EBSAs
- FAO – Objectives related to Vulnerable Marine Ecosystems and EA to fisheries
- Other UN bodies?
- Relevant work on areas used by Indigenous Peoples outside the Arctic

##### International level – IUCN and other NGOs

##### International level – Indigenous Peoples

##### International level – EU

- Marine Strategy Framework Directive – MSFD
- Short description of the directive, with a brief account of history and state of implementation
- Experiences from application, in general, and from Arctic EU member states in particular:
- Denmark
- Finland
- Sweden
- Other relevant EU legislation and activities?

##### International level – Nordic Council of Ministers

- Are there relevant projects or reports?

##### National level

- Canada (related to MPAs, co-management, and other?)
- Greenland
- Iceland
- Norway (related to Integrated Management Plans and other)
- Russia

- United States of America

Lessons learned from cases of practical implementation and use

***Conclusions and recommendations***

- Based on parts 1 and 2