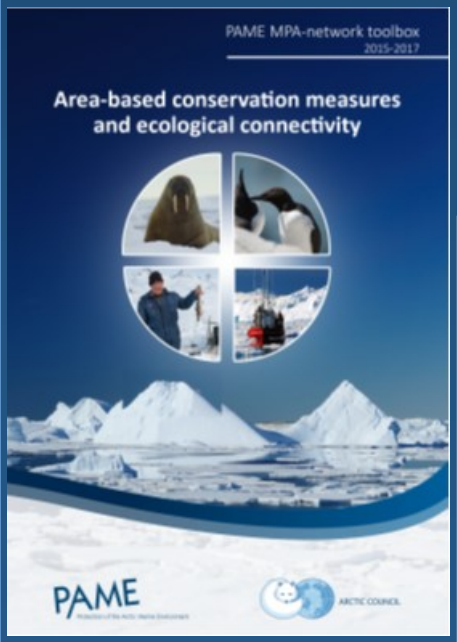
Science to Support Development of a Pan-Arctic Marine Protected Area Network

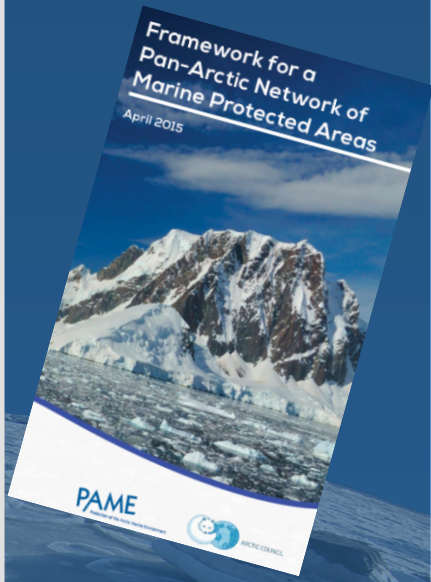
PAME Marine Protected Area Network Toolbox

Lauren Wenzel, NOAA
Martin Sommerkorn, WWF



I. Introduction (context and scope of report)
II. Area-based conservation measures: MPAs and other measures in MPA networks
III. Protecting ecological linkages: Connectivity as part of MPA network design
IV. Tools for Designing MPA Networks
V. Next Steps

Appendices (categories of Arctic marine biodiversity, area-based management tools, and case studies)



PAME
Protection of the Arctic Marine Environment

MPA Toolbox:
Other Area-based Conservation Measures

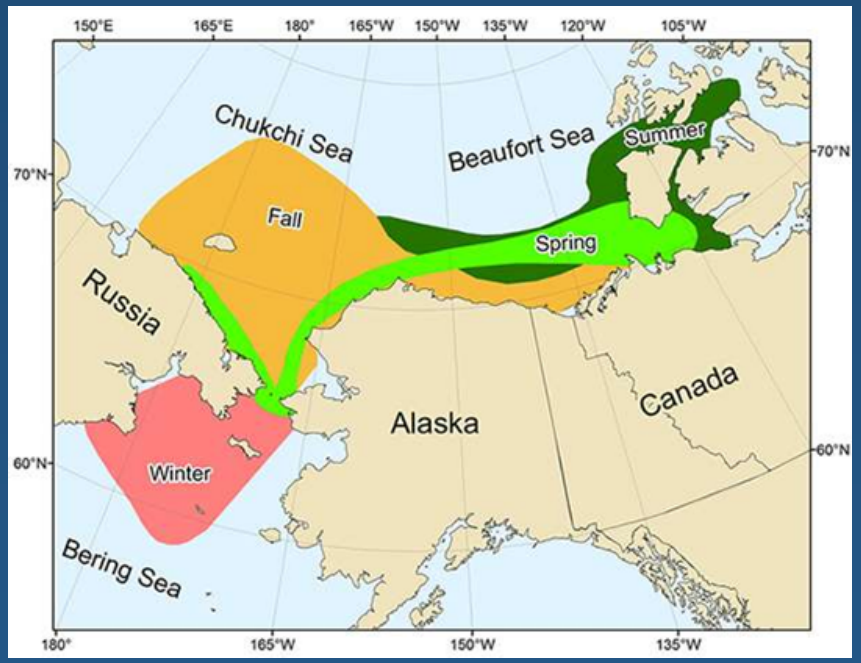
Benefits of including "other measures" in network design scoped and included in guidance and tools:

- Protection of biodiversity on the move
- Emerging pressures and precautionary approach
- Limiting specific threats or pressures during a critical period of time
- Partnerships for conservation outcomes

Type of Measure	Country	Managed/ Restricted or Prohibited Activities	Species Group/ Habitat feature, ecosystem process protected or specially managed	Management objective relevant for conservation/ special management of feature, habitat, species, or ecosystem process	Threat/ pressure/ impact addressed	Names / Example(s)	How Implemented (e.g. governance, regime, management Agency, seasonality, geographic coordinates, etc)	Comments (including any Arctic specificity of the measure)	Type of Measure
Area of special shipping regime.	Russian Federation	Shipping regime regulation	Marine ecosystems	Safety-relevant characteristic and performance of vessels. Navigational measures	Risk of oil spill, pollution and dumping of garbage, sewage and exploitation wastes	Northern Sea Route (territorial waters and EEZ from the Novaya Zemlya Islands to the Cape of Dezhnev)	Order № 7 of the Ministry of Transportation from 17.01.2013: http://www.consultant.ru/document/cons_doc_LAW_145233/	Applied in the Arctic	Area of special shipping regime

MPA Toolbox:
Understanding Connectivity

- Understanding and applying connectivity
  - Planktonic life stages
  - Active swimmers and flyers
- Integrating connectivity into network design
- Connectivity case studies



Map of Bowhead Whale Range. Source: North Slope Borough, Alaska

PAME
Protection of the Arctic Marine Environment

Proposal for 2017-2019 Workplan

- Workshops
  1. MPA Networks and Climate Change (Helsinki, Fall 2017)
  2. Incorporating Traditional Knowledge into MPA Networks (*Tentative*; TBD)
- Other products
  - Expansion of MPA Toolkit to address climate change/resilience
- A cross-disciplinary approach
  - Dialogue among scientists, managers, indigenous experts to inform and foster MPA networks
  - Additional collaboration with Arctic Council working groups (e.g. CAFF, AMAP)

PAME
Protection of the Arctic Marine Environment