

An NGO Perspective on Implementation of the EA in the Arctic: Progress and Possibilities

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Ocean Conservancy™



Circumpolar
Conservation
Union

Image: Paul Yancey



- 1. Why EA?**
- 2. What do we mean by EA?**
- 3. Progress on EA implementation in the Arctic**
 - National – U.S.**
 - International**
- 4. Possibilities: What are Next Steps & Opportunities**

Why an Ecosystem Approach?

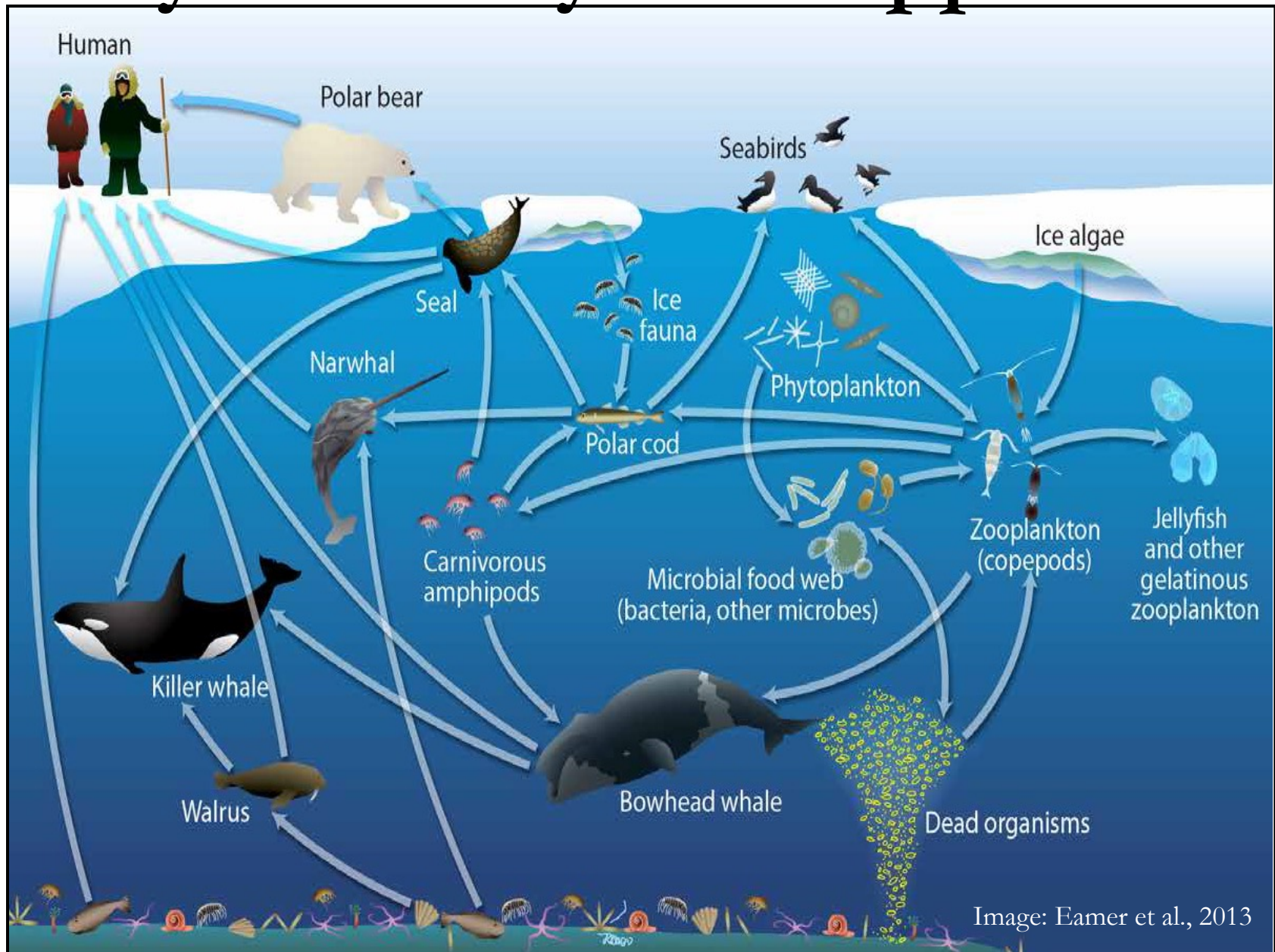


Image: Eamer et al., 2013

Change is Here



Image: Andrew Hartsig



Image: U.S. Coast Guard/Sara Francis



Image: NOAA

Getting it Right



Vision

Arctic Marine Strategic Plan

Healthy, productive, and resilient Arctic marine ecosystems that support human well-being and sustainable development for current and future generations.

Ecosystem Approach

Arctic Council Definition

The ecosystem approach is the comprehensive integrated management of human activities based on the best available scientific and traditional knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity.



Image: Cynthia Cristman, NOAA

Possible Methodology for Applying EA

FUNDAMENTAL

IDENTIFY
the ecosystem



DESCRIBE
the ecosystem



DERIVATIVE

Set ecological
OBJECTIVES



ASSESS
the ecosystem



VALUE
the ecosystem



MANAGEMENT

MANAGE
human activities

Ecological Quality Objectives

Ecological Quality Objectives





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Image: Cynthia Cristman, NOAA

Arctic Boundary as defined by the Arctic Research and Policy Act (ARPA)

All United States and foreign territory north of the Arctic Circle and all United States territory north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwim Rivers; all contiguous seas, including the Arctic Ocean and the Beaufort, Bering and Chukchi Seas; and the Aleutian chain.¹



Acknowledgement: Funding for this map was provided by the National Science Foundation through the Arctic Research Mapping Application (amap.org) and Contract

US National Ocean Policy



Image: Whitehouse.gov

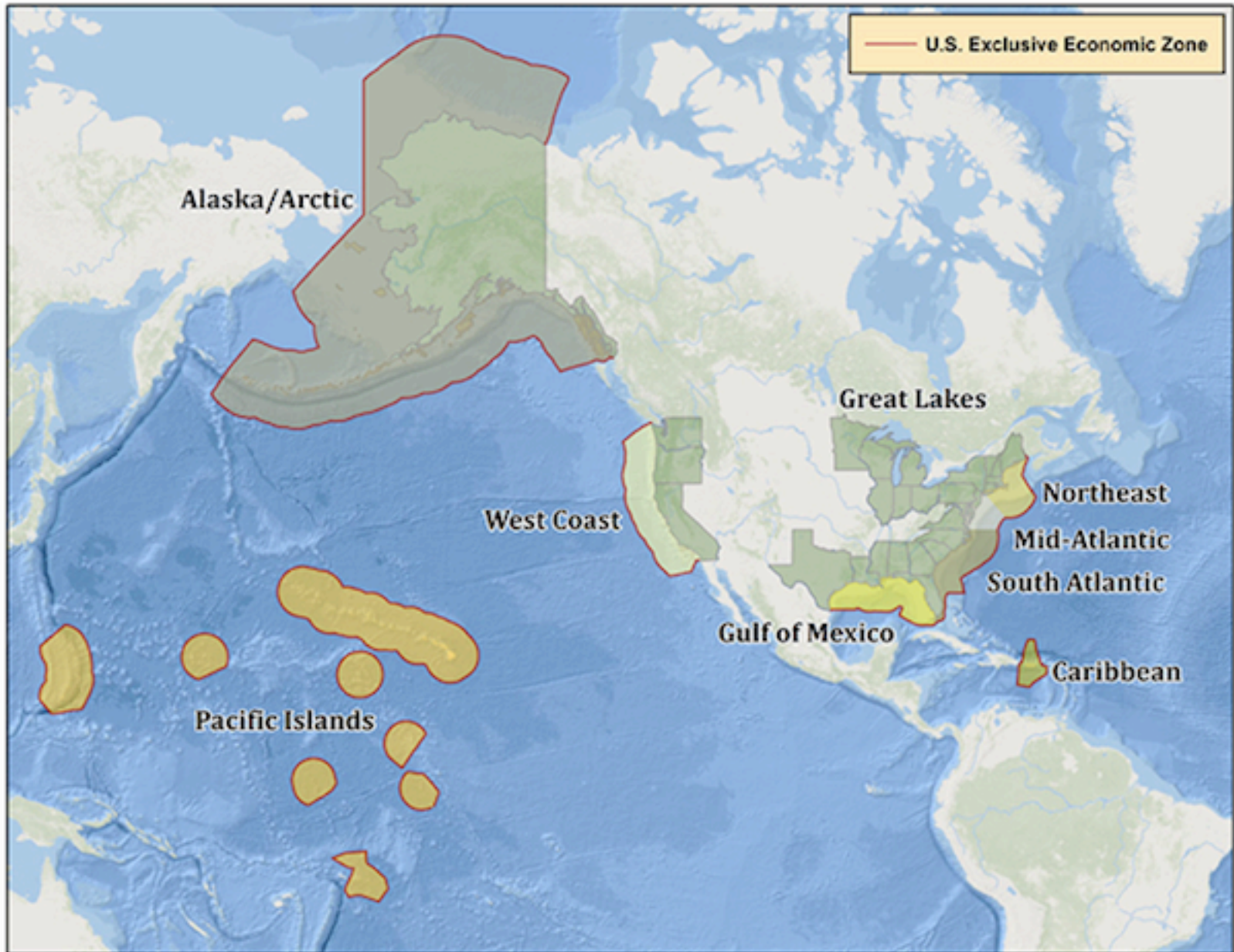


Image: Data.gov

Photo: Chris Miller, ASMI.

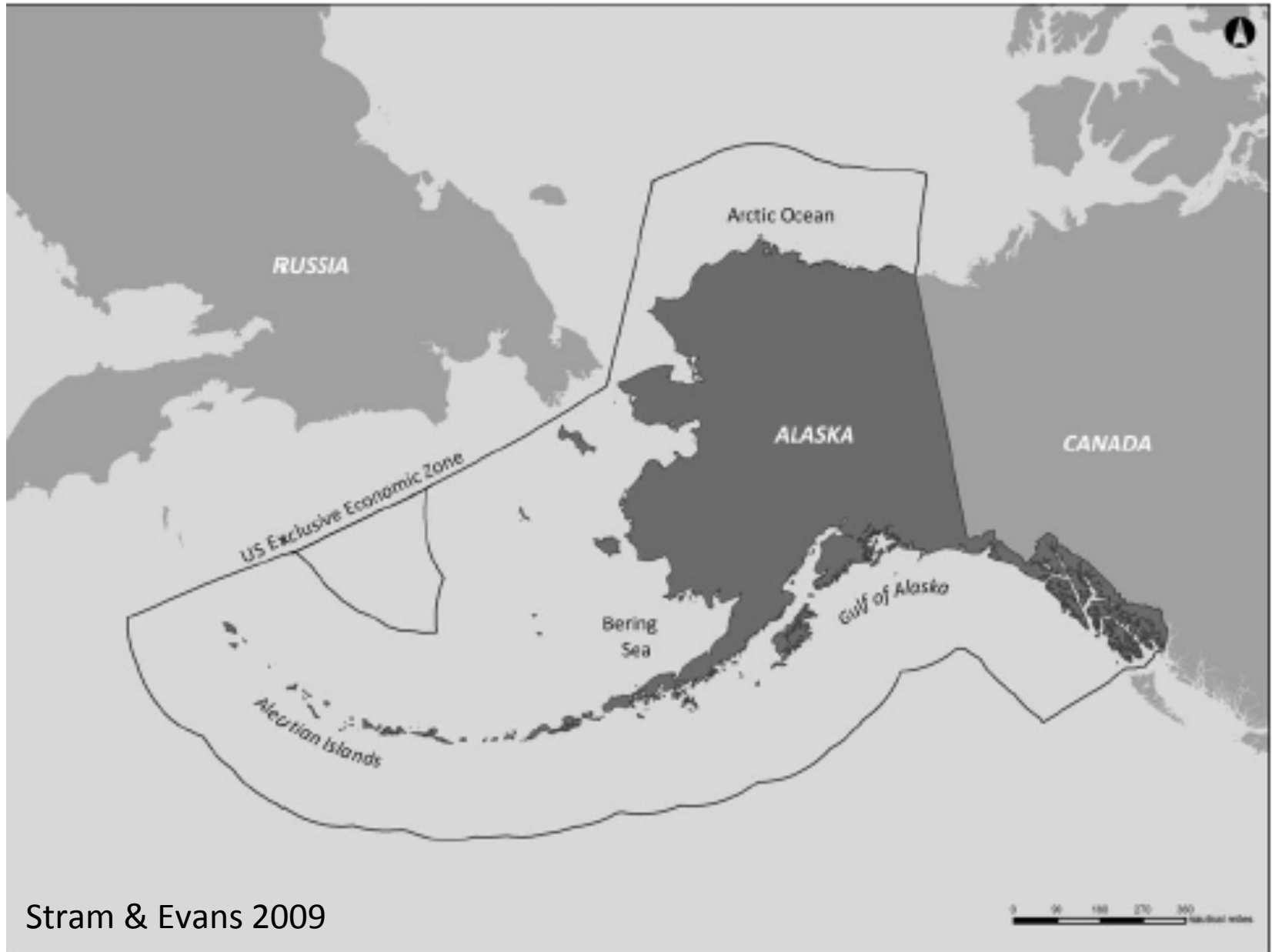


Image: NOAA



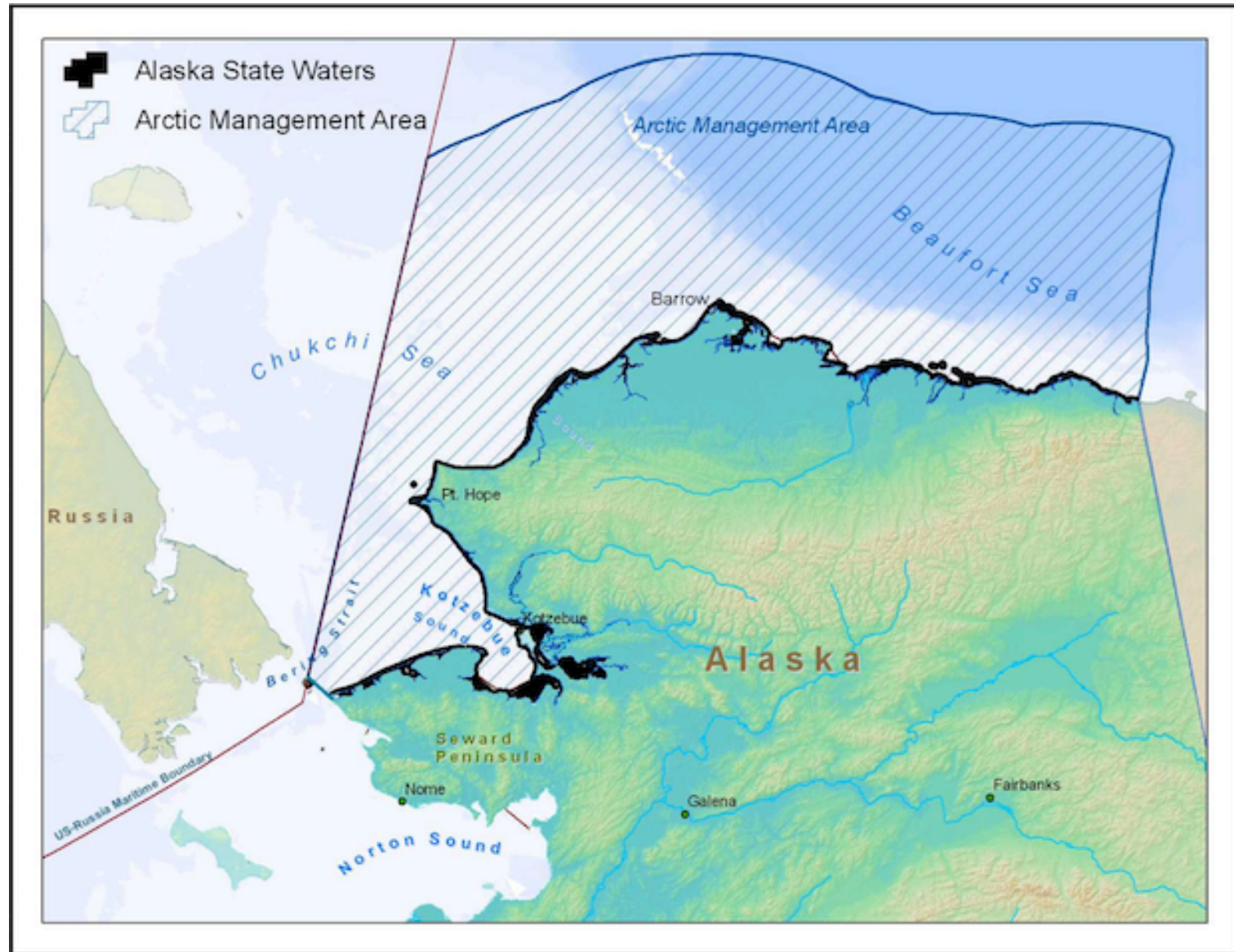
Shawn Harper/UAF

Ecosystem Based Fishery Management in N. Pacific

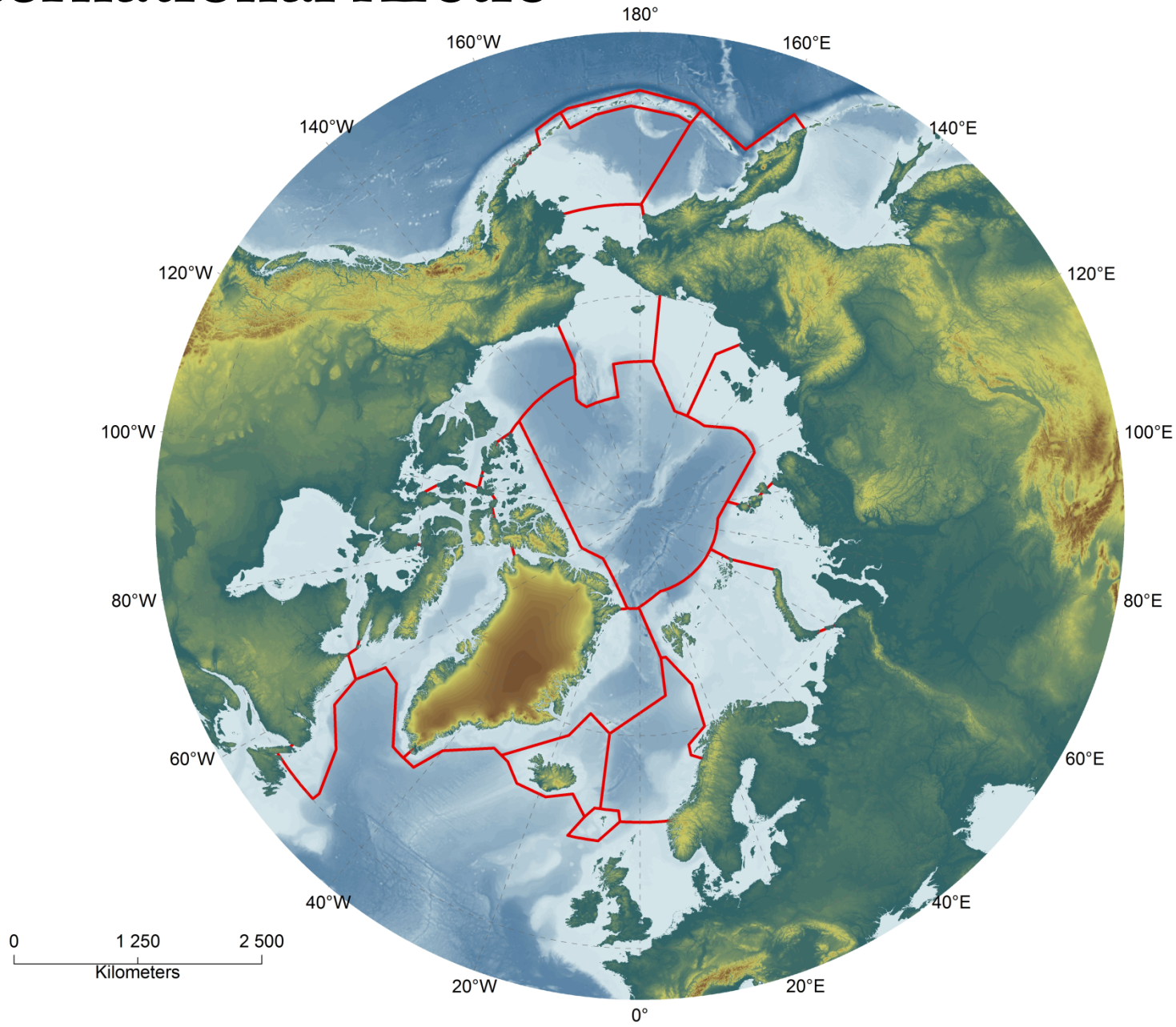


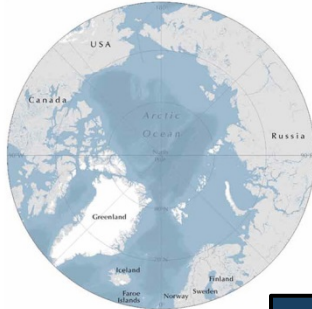
Stram & Evans 2009

Arctic FMP



International Arctic





(Afrikan Holm red)

Best Practices in Ecosystem-based
Oceans Management in the Arctic

NORDE POLARINSTITUTET / NOROISLANDSKA POLARINSTITUTET / POLARINSTITUTET / POLARINSTITUTET / CENTRE, NO-5038 TROMSØ



WORKSHOP REPORT

PAME, CAFF, AMAP, SDWG
Ecosystem Approach to Management Work

Methodology and status of development of ecosystem
(sustainability) objectives for Arctic Large Marine Eco

Bergen - Norway
26-27th May 2015



PAME

Protection of the Arctic Marine Environment

The Ecosystem Approach to Management of Arctic Marine Ecosystems



CONCEPT PAPER

It means integrated management of human activities to achieve sustainability

The ecosystem approach to management has been described as a 'strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way' (UN Convention on Biological Diversity - CBD).

The ecosystem approach to management, denoted EBM by the Arctic Council, is defined as:

"The comprehensive integrated management of human activities based on the best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity" (Arctic Council, 2013)

Integrated management of natural systems, including humans, is a concept known by many different names, such as integrated ocean management, ecosystem-based management (EBM), or most simply, the ecosystem approach to management (EAM). EBM and EA are synonymous within the Arctic Council. Internationally the term EA is widely used, for example in global UN Biodiversity Convention (CBD).

It requires focus on the state of the ecosystem

The EA to management, as an inclusive framework for balancing competing development interests to enable the sustainability of ecosystems, differs from the conventional single-sector and single-species management commonly applied in the past by requiring specific knowledge of the overall state of the ecosystem.

The focus on understanding the state of the ecosystem has two sides to it. One side is to define what goal or acceptable states of the ecosystem enable sustainability, along with a corresponding set of ecological objectives that can guide management decisions toward achieving and maintaining good or acceptable status. The other side is to assess or evaluate the state in order to determine how much it is influenced by human uses and activities.

The two sides of understanding the state of the ecosystem, while related, are not the same from a practical point of view. For example, we can set objectives for those ecosystem components amenable to directed management actions such as commercially exploited or threatened species.

Other components, such as plankton communities or climate variability, while susceptible to the consequences of human activities, are not amenable to directed management actions, at least in the short term. Nonetheless understanding the state of the ecosystem in terms of as many physical and biological components as can be measured is essential to achieve the goal of sustainability for the Arctic ecosystems on which the sustainability of its economic and social systems depend.



PAME-LED GROUP OF EXPERTS ON THE ECOSYSTEM APPROACH TO MANAGEMENT

TERMS OF REFERENCE AND WORKPLAN
2011 - 2013



ECOSYSTEM APPROACH PROGRESS REPORT

Joint Group of Experts on the
Ecosystem Approach to Management

APRIL 2015



PAME Third Ecosystem Approach to Management Workshop Report

Reykjavik, Iceland
June 10 - 11, 2013





Image: Susan Humphris, Woods Hole Oceanographic Institution)

Possibilities





Arctic administrative areas

compiled by
Wilfried K. Dalmann,
Norwegian Polar Institute



Indigenous peoples of the Arctic countries

Subdivision according to language families

 Na-Dene family	 Eskimo-Aleut family
 Athabaskan branch	 Inuit group of Eskimo branch
 Eyak branch	 Yupik group of Eskimo branch
 Tlingit branch	 Aleut group
 Haida branch	 Uralic-Yugagran family
 Penutian family	 Finno-Ugric branch
 Macro-Algonkian family	 Samodic branch
 Algonkian branch	 Yukagran branch
 Wakasha branch	 Altaic family
 Salish branch	 Turkic branch
 Macro-Stouxs family	 Mongolic branch
 Sioux branch	 Chukotko-Kamchatkan family
 Iroquois branch	 Ket (isolated language)
 Indo-European family	 Nivkhi (isolated language)
 Germanic branch	 Aine (isolated language)

Notes:

For the USA, only peoples in the State of Alaska are shown. For the Russian Federation, only peoples of the North, Siberia and Far East are shown. Majority populations of independent states are not shown, not even when they form minorities in adjacent countries (e.g. Finns in Norway). Areas show colours according to the original languages of the respective indigenous peoples, even if they do not speak these languages today. Overlapping populations are not shown. The map does not claim to show exact boundaries between the individual groups.

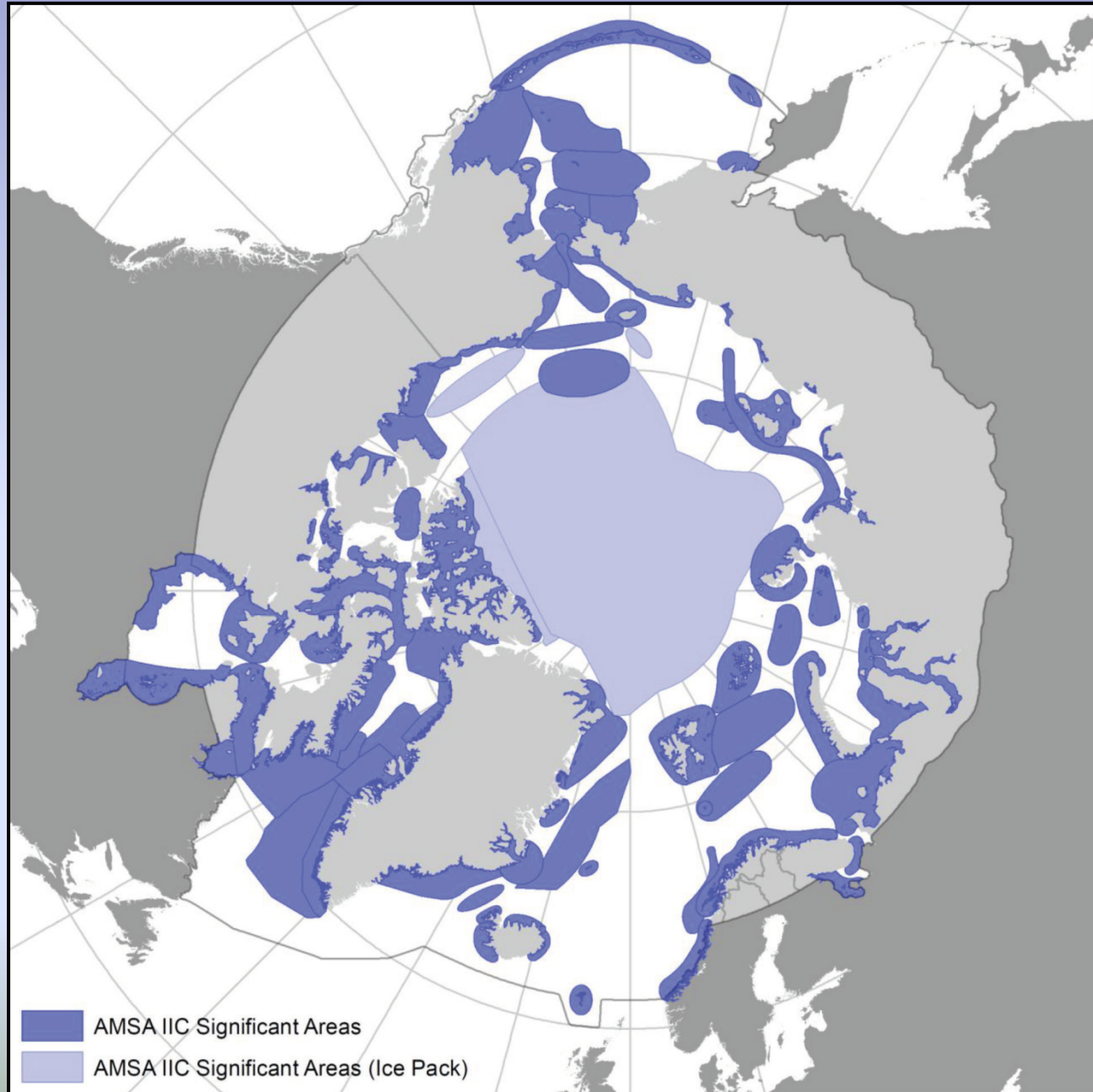
In the Russian Federation, indigenous peoples have a special status only when numbering less than 50,000. Names of larger indigenous peoples are written in green.

Opportunities: Marine Cooperation



Image: U.S. Fish and Wildlife Service

Opportunities: Important Marine Areas





Questions?

Image: NASA