



NOAA
FISHERIES

Alaska Fisheries
Science Center
Auke Bay
Laboratories

BOEM
BUREAU OF OCEAN ENERGY MANAGEMENT

“Objectives in US Federal and State of Alaska legislation and management”

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PAME, CAFF, AMAP, SDWG – Ecosystem Approach Expert Group
Fifth Ecosystem Approach Workshop

Session 1 : Review of existing ecological objectives in national
legislation and management systems

May 26th, 2015



Yellowstone National Park

National park in United States of America

1872

U.S. Pioneers of Ecosystem Approach



Introduced the concepts of environmental ethics, biodiversity and ecology into wildlife management

Aldo Leopold 1887 - 1948



Rachel Carson 1907-1964

An American marine biologist and conservationist whose book *Silent Spring* and other writings are credited with advancing the global environmental movement.

The Golden Decade in US Environmental Legislation and Law – 1970s

National Environmental Policy Act 1970 US

Marine Mammal Protection Act 1972

Marine Protection Research and Sanctuaries 1972

Clean Water Act 1972

Endangered Species Act 1973

Magnuson Stevens Act 200 mile limit 1976

Coastal Zone Management Act 1977

NEPA Requirements

Title I of NEPA contains a Declaration of National Environmental Policy which requires the federal government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony.

Sustainable Use

Marine Mammal Protection Act 1972 US
stocks should not be permitted to diminish beyond the point at which they cease to be a significant functioning element in the ecosystem of which they are a part

Endangered Species Act of 1973 US (ESA)
Legal mandate to protect species in all or a portion of their range and to conserve the ecosystems on which they depend

Magnuson Stevens Fishery Conservation and Management Act 1976 US

Established 200 mile fishing zone and sustainable management of fish stocks within the zone.

Ten National Standards

#1 Prevent overfishing to achieve sustainable use Bering Sea has an Optimal Yield Set at 2M Metric tons

Statutory Requirements:

- OCS Lands Act
- Endangered Species Act
- Clean Air Act
- Clean Water Act
- Marine Mammal Protection Act
- Magnuson –Stevens Fishery Conservation and Management Act
- National Environmental Policy Act
- National Historic Preservation Act
- Oil Pollution Act
- Resource Conservation and Recovery Act
- Marine Plastic Pollution Research and Control Act
- Executive Orders:
 - 12898: Environmental Justice
 - 13112: Aquatic Invasive Species
 - 13212: Actions to Expedite Energy-Related Projects
 - 13175: Consultation and Coordination with Indian Tribal Governments
 - 13158: Marine Protected Areas

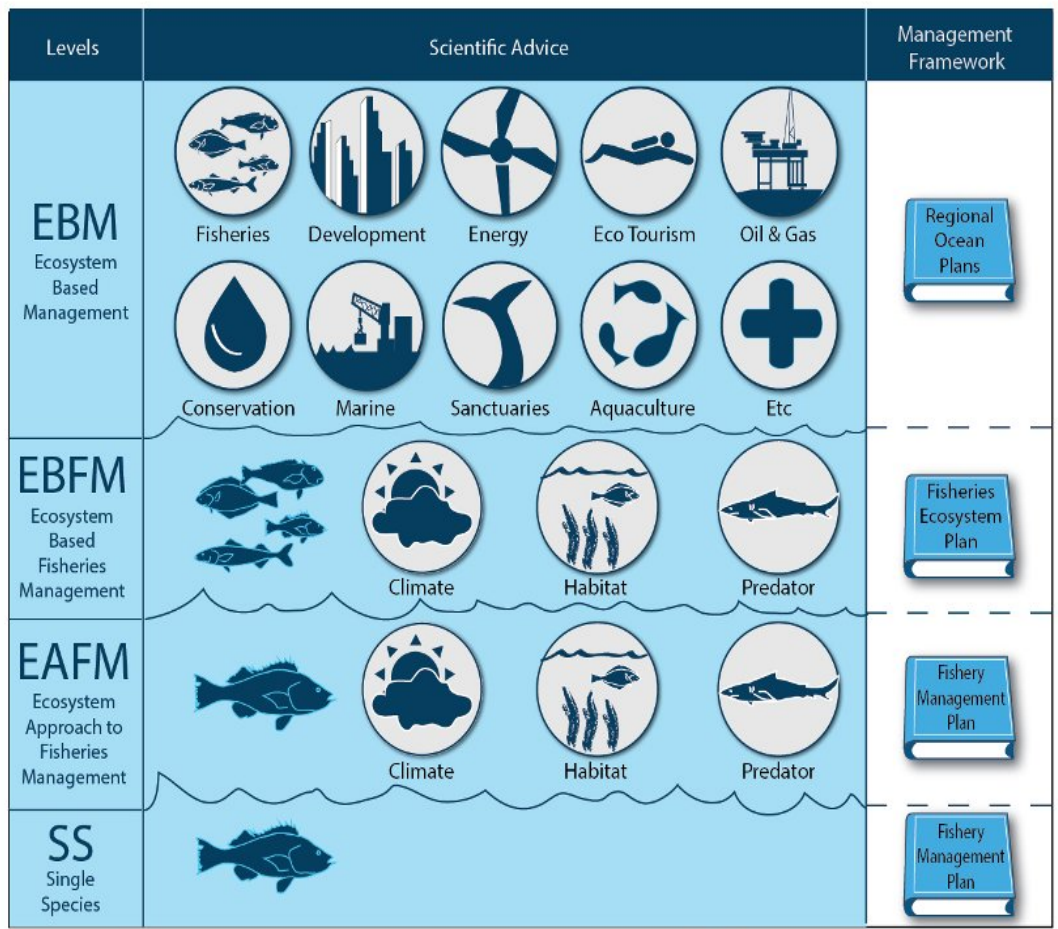
– 12114: Environmental Effects Abroad

- Submerged Lands Act
- Energy Policy and Conservation Act
- Export Administration Act
- Migratory Bird Treaty Act
- Pollution Research and Control Act
- Rivers and Harbors Appropriation Act
- Ports and Waterways Safety Act
- Federal Oil and Gas Royalty Management Act
- Arctic Research and Policy Act

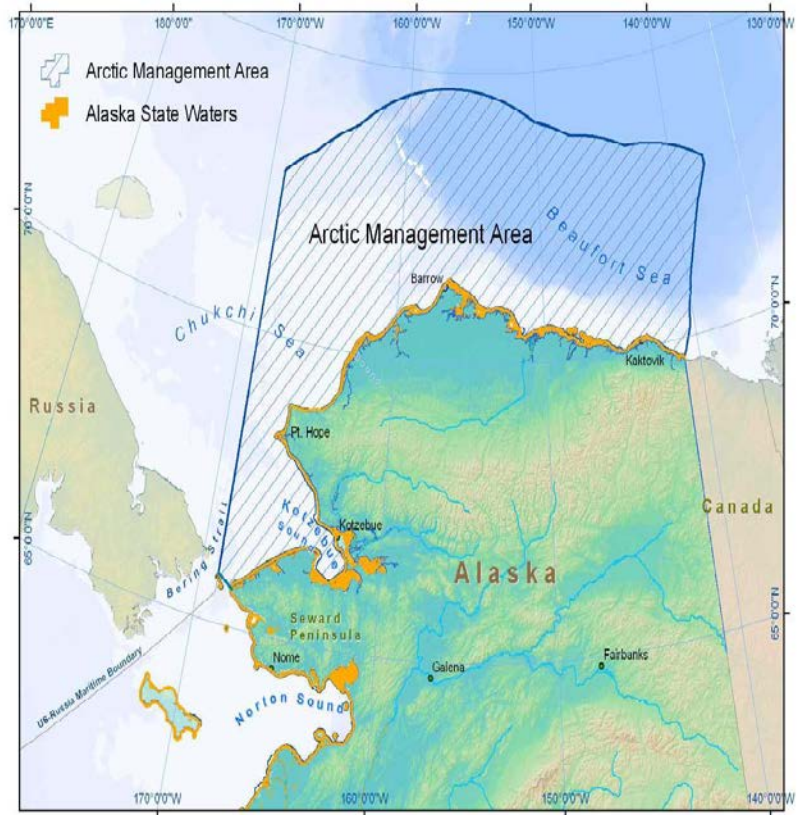
National Environmental Policy Act Analyses:

- Lease Sales, Exploration Plans, Development and Production Plans, and Geophysical and Geological Permits
- Developing Mitigation Measures
- Developing Alternatives
- Developing Deferrals

Ecosystem-based fisheries management (EBFM) Bering Sea & Aleutian Islands



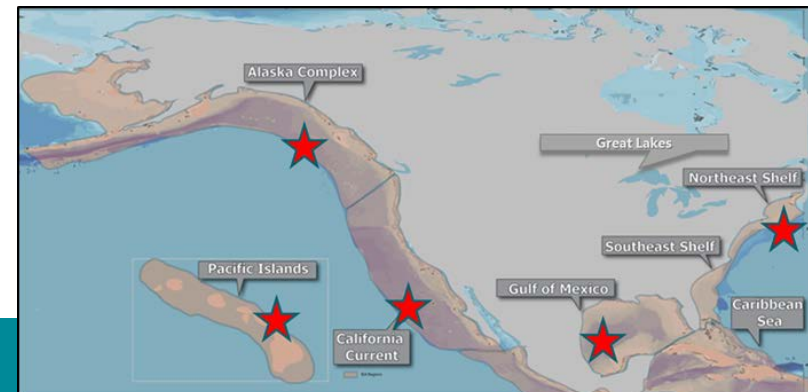
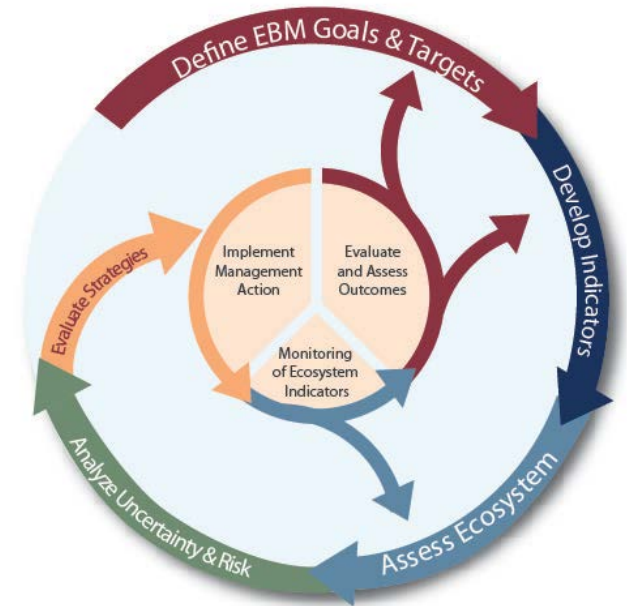
US Arctic Waters- precautionary closure



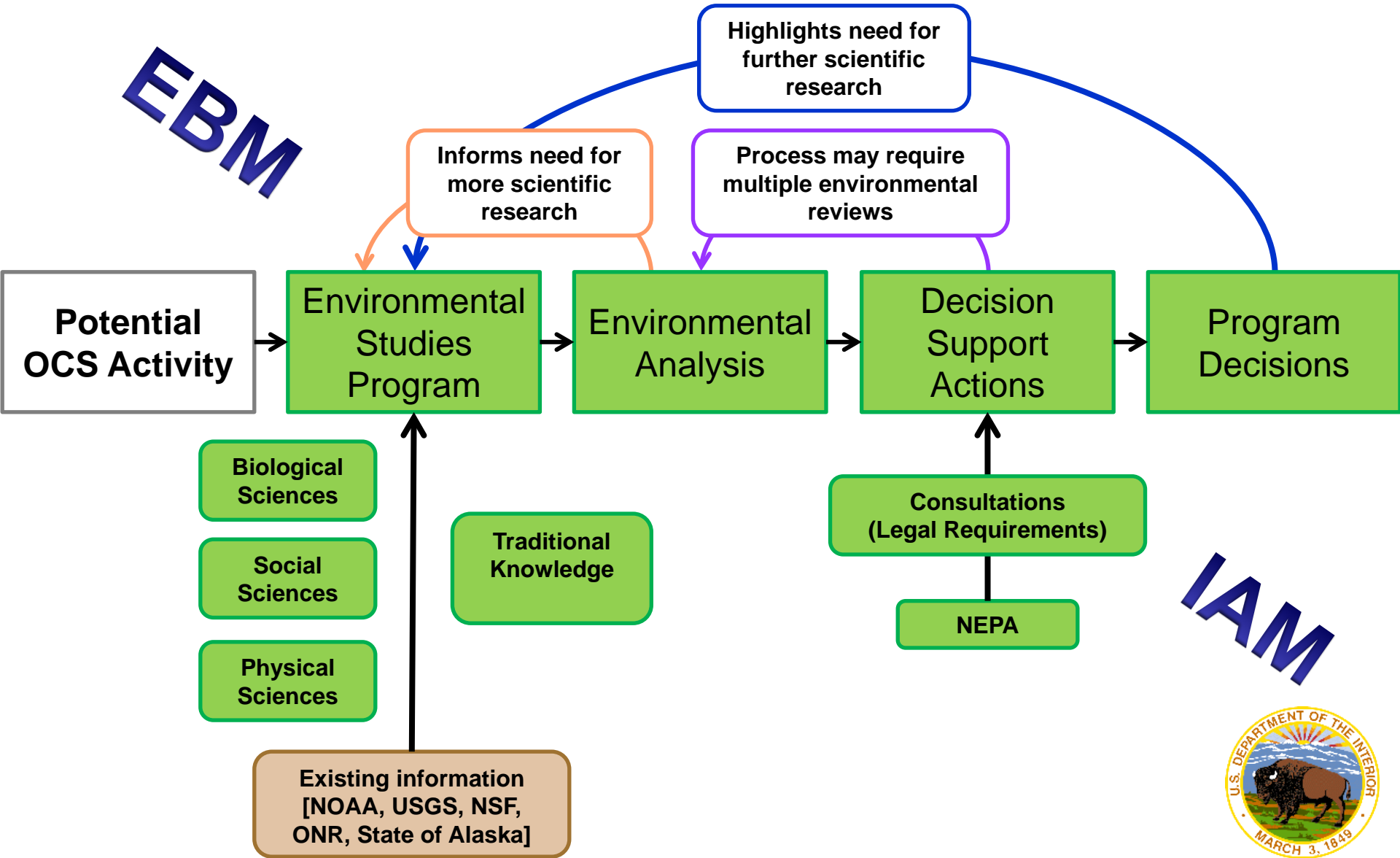
NOAA's Integrated Ecosystem Assessment (IEA) Program

IEAs Provide an Analytical Framework to Implement EBM

- Is a decision-support process that synthesizes and analyzes diverse data and ecosystem model outputs
- Is modular, iterative, scaleable, and adaptable
- Shares a common national framework, yet with regional variation in implementation
- Provides assessments of the ecosystem across and within multiple ocean-use sectors



EBM

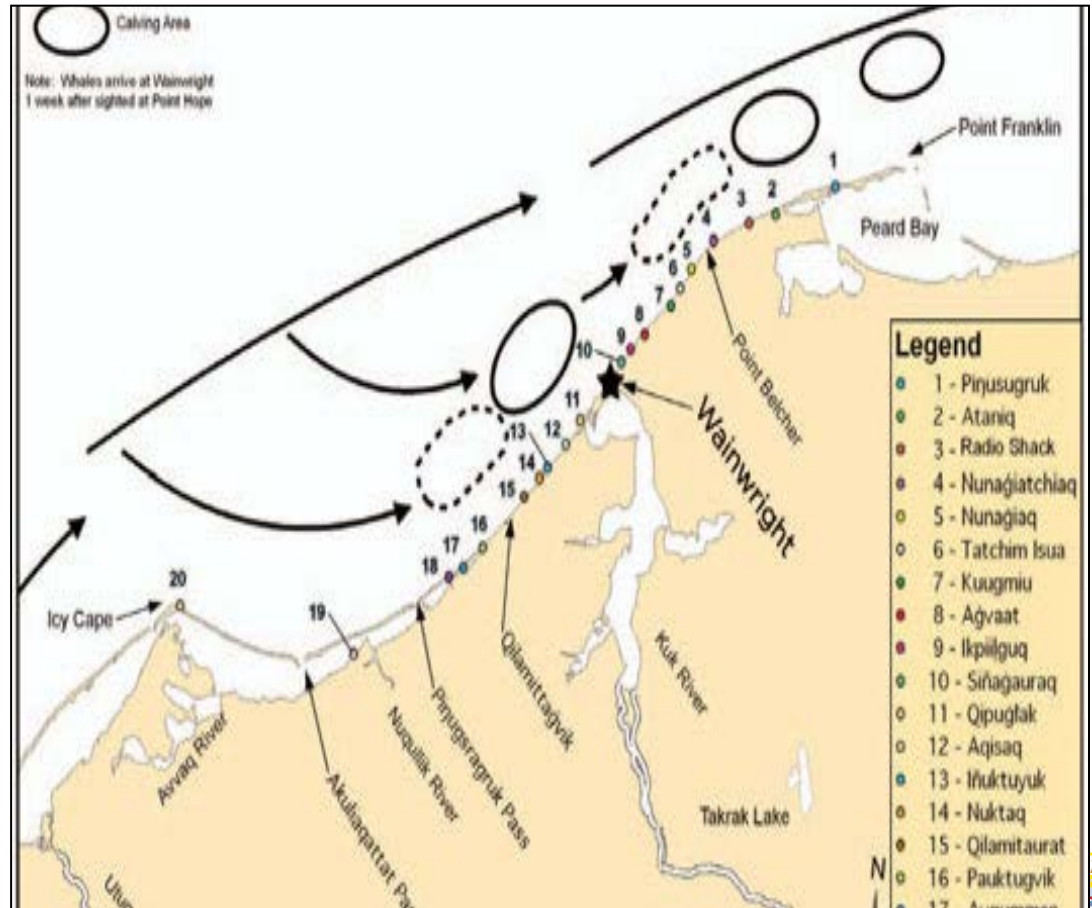


IAM

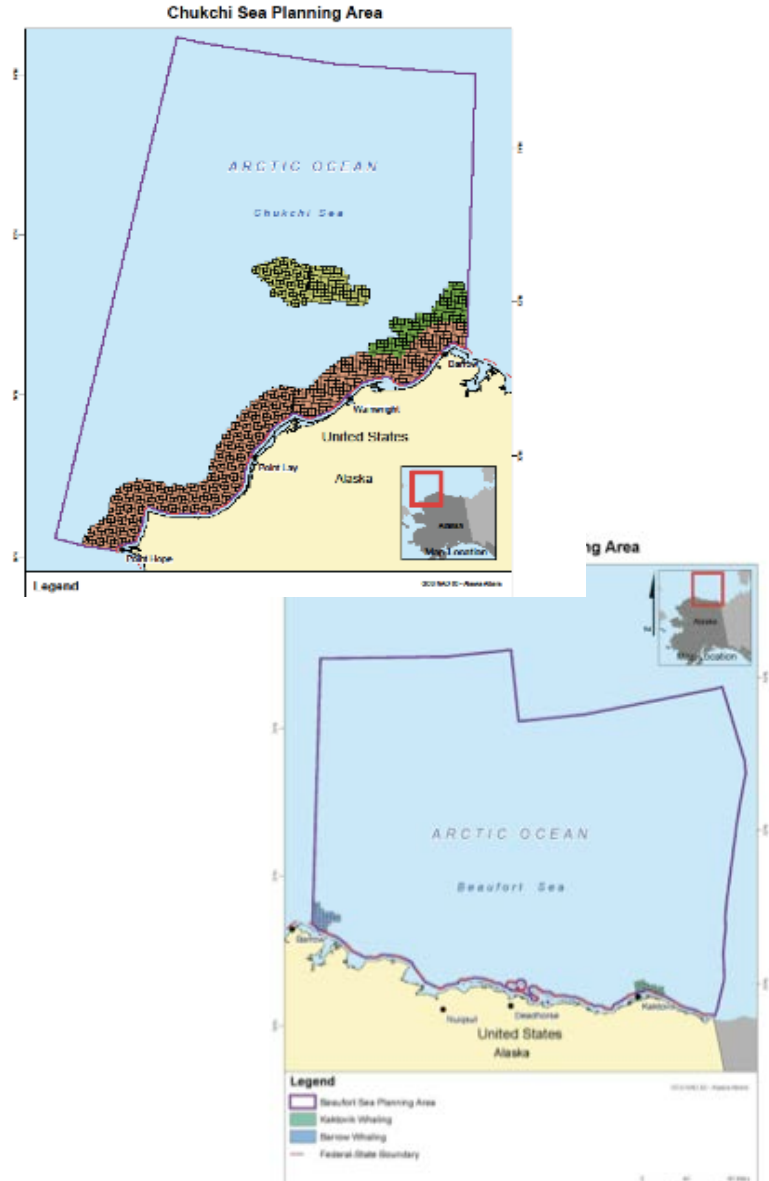


Traditional Knowledge Regarding Bowhead Whales in the Chukchi Sea

- ESP co-funded workshop (2011) that invited local experts to document TK sources on whale movement and behavior
- Workshop provided observational insights from hunters
- Patterns of spring migration structure segregated by whale size
- Patterns of feeding along ice margin
- Changes in timing of migration and ice conditions
- Changes in traditional Iñupiat conservation practices



- On January 27, 2015, President Obama withdrew five areas in the Beaufort Sea and Chukchi Seas from future oil and gas leasing
- **Three areas of the Chukchi Sea:**
 - *25 mile buffer area along the coast;*
 - *Subsistence use area near Barrow;* and
 - *Hanna Shoal region lying within contours of the 40 meter isobath*
- **Two areas of the Beaufort Sea:**
 - *Subsistence whaling areas near Barrow and Kaktovik*



Recent US Arctic Strategies Documents

Recent Documents

ARCTIC RESEARCH PLAN:
FY2013-2017

Executive Office of the President
National Science Foundation

US ARCTIC RESEARCH COMMISSION

REPORT ON THE Goals and Objectives for
Arctic Research 2013-2017

FOR THE US ARCTIC RESEARCH PROGRAM PLAN

RESPONDING TO

Oil Spills
IN THE U.S. ARCTIC
MARINE ENVIRONMENT

NATIONAL RESEARCH COUNCIL
OF THE NATIONAL ACADEMIES

Arctic
NOAA'S ARCTIC ACTION PLAN

SUPPORTING THE
NATIONAL STRATEGY FOR
THE ARCTIC REGION

UNITED STATES COAST GUARD
ARCTIC STRATEGY

MAY 2013
WASHINGTON, D.C.

Managing
for the Future
in a Rapidly
Changing Arctic

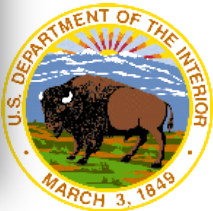
A REPORT TO THE PRESIDENT

Interagency Working Group on Coordination of
Domestic Energy Development and Permitting in Alaska

Chair: David J. Hayes
Deputy Secretary, Department of the Interior

NATIONAL STRATEGY
FOR THE ARCTIC REGION

MAY 2013



Integrated Arctic Management: a science-based, whole-of-government approach to stewardship and planning in the U.S. Arctic that integrates and balances environmental, economic, and cultural needs and objectives. It is an adaptive, stakeholder-informed means for looking holistically at impacts and sensitivities across the U.S. Arctic and generating sustainable solutions.



BENEFITS of this approach: ensures the consideration of cumulative impacts; streamline decision-making providing greater operational certainty for participants, and makes participation of stakeholders more efficient.

Walrus On Ice

Source: *Ecological Society of America* (2011)

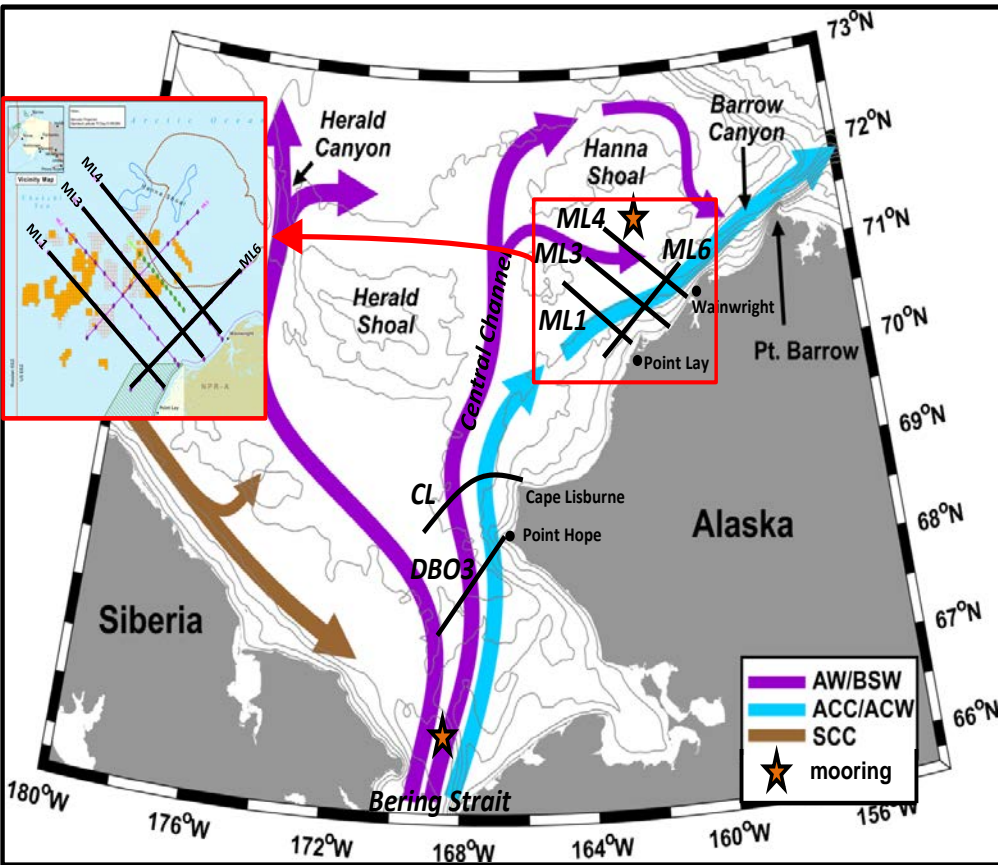
- 1) Protect the Arctic Environment and Conserve Arctic Natural Resources;
- 2) Use Integrated Arctic Management to Balance Economic Development, Environmental Protection, and Cultural Values; and
- 3) Increase Understanding of the Arctic through Scientific Research and Traditional Knowledge.

Each policy goal is then carried out through specific scientific programs that identify ecological objectives, which would feed into an Integrated Ecosystem Assessments (IEA).

Monitoring Change in the Environment

Distributed Biological Observatory (DBO)

Arctic Marine Biodiversity Observing Network AMBON



<http://www.arctic.noaa.gov/dbo/>

Thank You!

