



**NOAA**  
**FISHERIES**

# Current management of MPAs and other area-based management

Perspectives of NOAA Fisheries and NOAA Ocean Service

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# NOAA's Mission

- Science, Service, Stewardship
  - To understand and predict changes in climate, weather, oceans, and coasts
  - To share that knowledge and information with others
  - To conserve and manage coastal and marine ecosystems and resources
- NOAA's Vision of the Future
  - Healthy ecosystems, communities, and economies that are resilient in the face of change

# NOAA's Arctic Vision

- NOAA envisions an Arctic where:
  - Conservation, management, and use are based on sound science and support healthy, productive, and resilient communities and ecosystems; and
  - The global implications of Arctic change are better understood and predicted

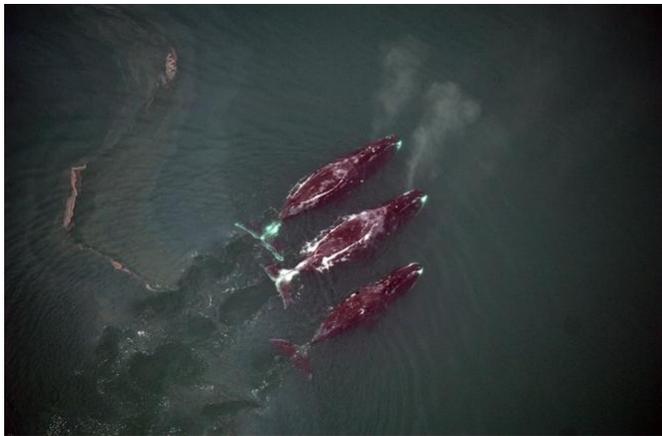


Photo credit: Cynthia Christman, NOAA

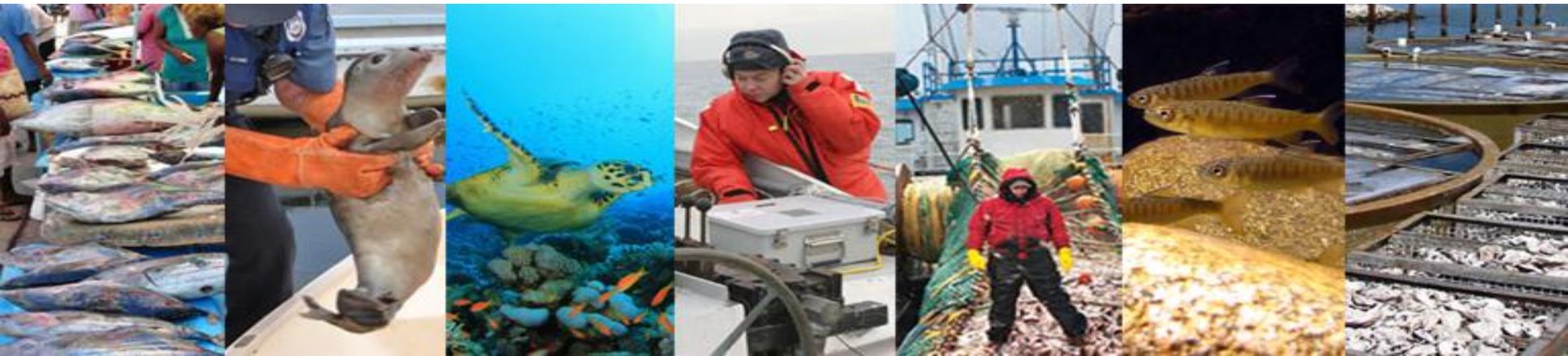


Photo credit: Jon Isaacs, AECOM



# NOAA Fisheries Mission

- Providing vital services for our nation's ocean resources and their habitat—
  - Productive and sustainable fisheries
  - Safe sources of seafood
  - Recovery and conservation of protected species
  - Healthy ecosystems
- All backed by sound science and an ecosystem-based approach to management



# Marine Managed Areas: Fisheries

- Seasonal and gear restrictions
- Moratoria
- Coordination with fishery management council and regulations

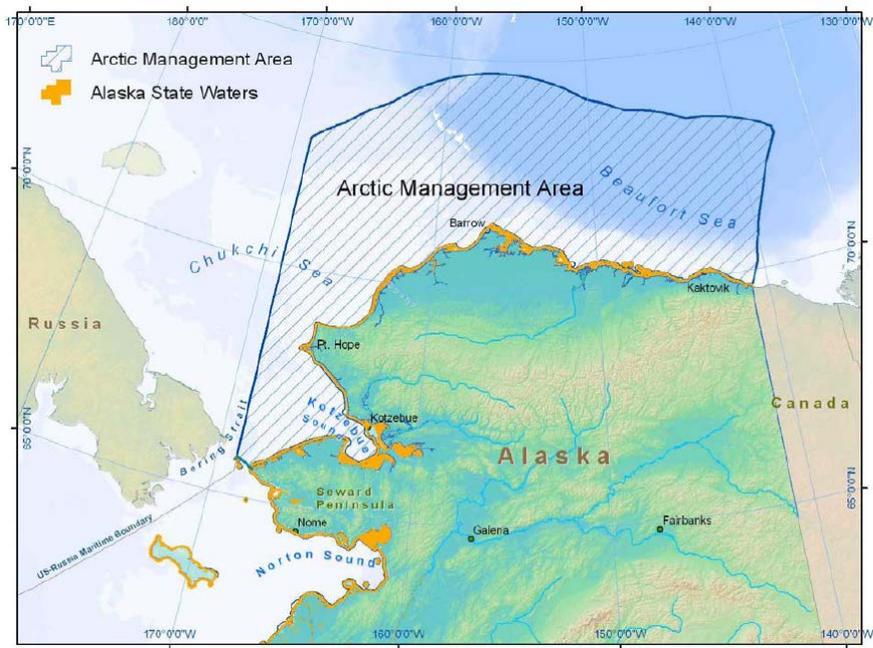
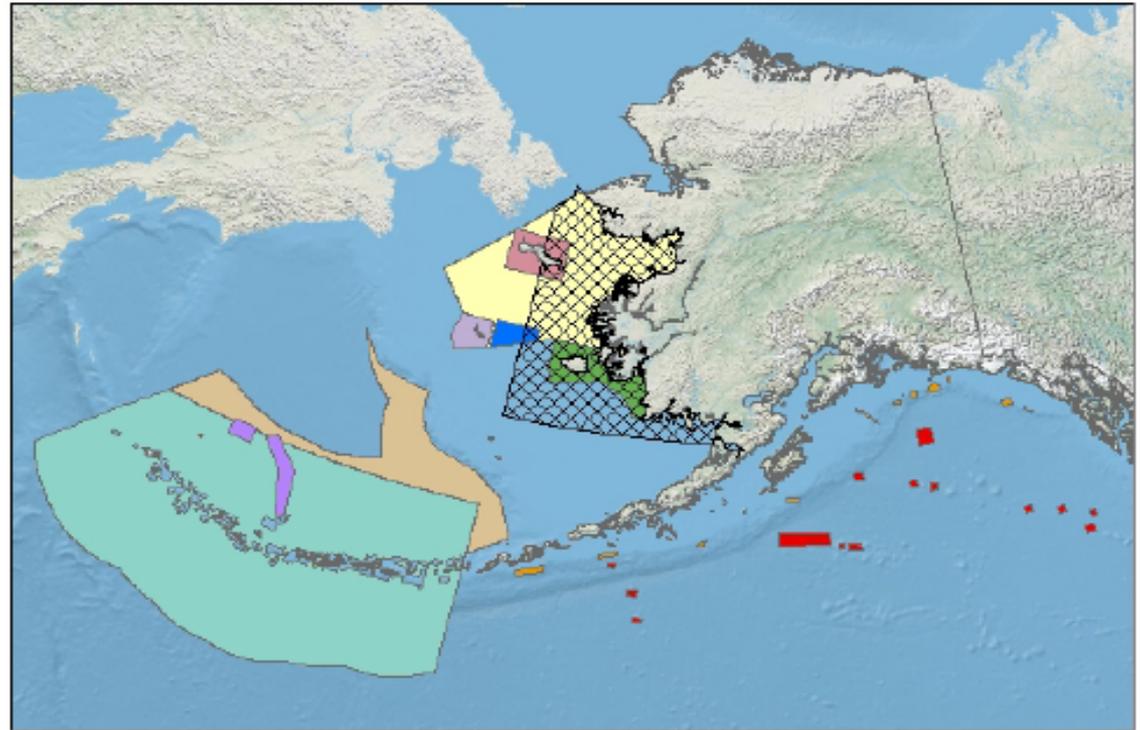


Photo credit: JJ Vollenweider, NOAA Fisheries

# Marine Managed Areas: Habitat

- Essential Fish Habitat (EFH)
- Habitat Area of Particular Concern
- Habitat Conservation Area
- Habitat Protection Area
- Habitat Conservation Zone

EFH Areas Protected from Fishing in the US North Pacific

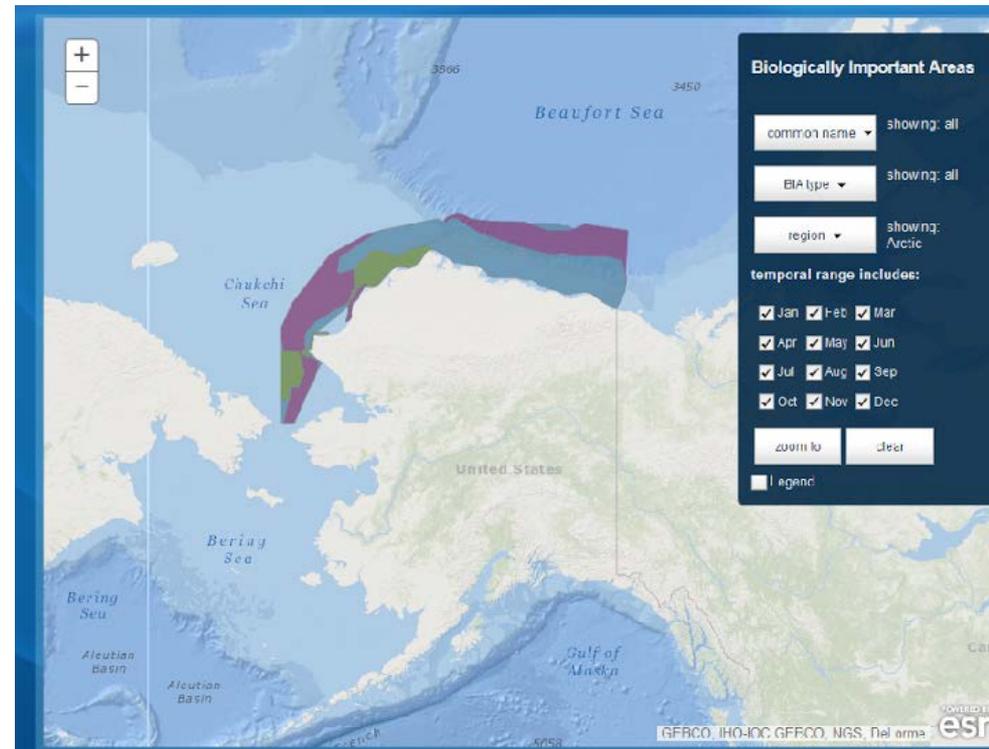


Site Name (Acres)

 Bering Sea subarea 514 (73,374,839)	 Gulf of Alaska Slope Habitat Conservation Areas (1,767,984)
 Alaska Seamount Habitat Protection Area (4,516,581)	 Modified Gear Trawl Zone (2,784,938)
 Aleutian Islands Coral Habitat Protection Area (93,230)	 Northern Bering Sea Research Area (52,486,158)
 Aleutian Islands Habitat Conservation Area (236,826,874)	 Nunivak Island, Etolin Strait, Kuskokwim Bay (6,266,474)
 Bering Sea Habitat Conservation Area (39,937,296)	 St. Lawrence Island Habitat Conservation Area (7,042,936)
 Bowers Ridge Habitat Conservation Zone (4,480,137)	 St. Matthew's Island Habitat Conservation Area (3,483,421)
 Gulf of Alaska Coral Habitat Protection Area (11,441)	

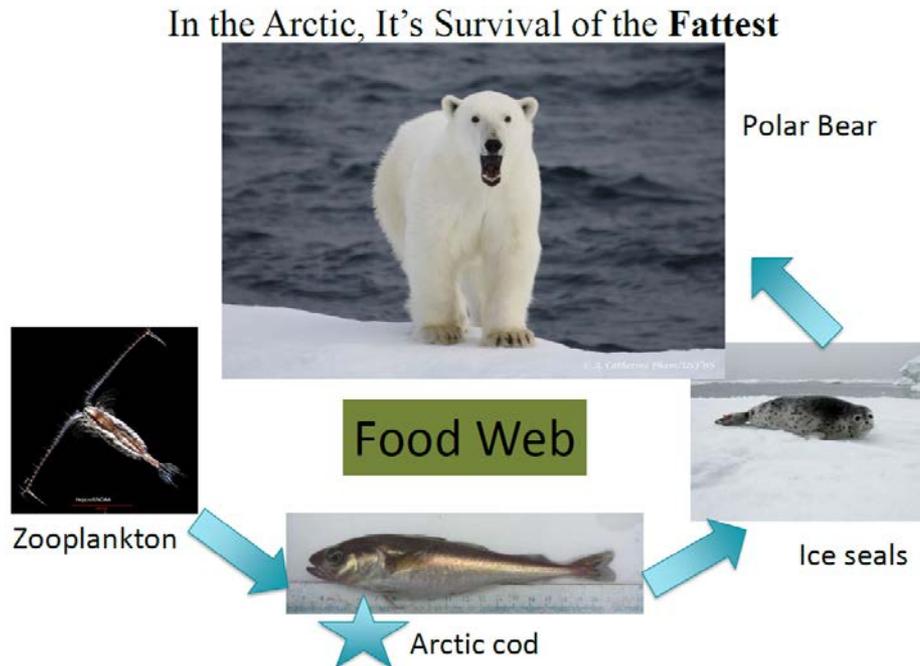
# Marine Managed Areas: Protected Species

- Critical habitat
- Time/area closure mitigation measures (MMPA, ESA, NEPA)



# Threats or Vulnerabilities

- Changes in marine community that could preclude or adversely impact recovery of protected species
- Currently no overfishing of commercial stocks

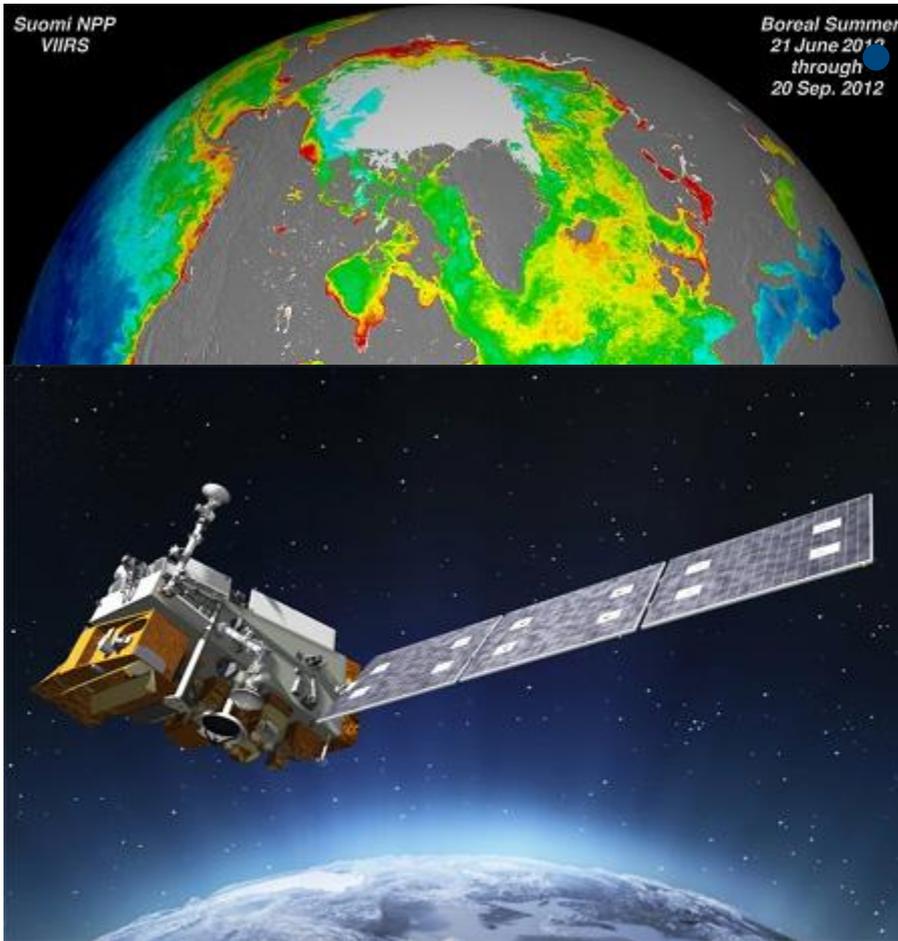


# Opportunities



- Fishery management process
- ESA consultations and MMPA and NEPA processes
- Habitat Focus Area(s)

# New Satellite Tools



## Joint Polar Satellite System

- Visible Infrared Imaging Radiometer Suite
  - Day/Night Band can detect vessels not reporting locations
  - better sea surface temperature data
  - ocean color data

# Coastal Zone Management Act



## Key Elements

- Protecting natural resources,
- Managing development in high hazard areas,
- Giving development priority to coastal-dependent uses,
- Providing public access for recreation,
- Prioritizing water-dependent uses,
- Coordinating state and federal actions.

# Alaska Ocean Observing System

## Observations & Data

- Increase access to existing coastal and ocean data;
- Package information and data in useful ways to meet the needs of stakeholders; and



### **AOOS Increases Observing Activities in the Arctic**

A robotic underwater glider is now flying off the northwest coast of Alaska monitoring marine mammal distributions and their relationship with oceanographic conditions in the Chukchi Sea.

**AOOS Arctic Portal**

- Polar projection
- Handles many data types
- More than 200 layers
  - GIS/project type data
  - Satellite imagery
  - Real-time sensors
  - Forecast models
- Visualize data stacks
- Explore by time
- Download data

The screenshot shows the Arctic Portal interface with a map of the Arctic region displaying various data layers in different colors (red, yellow, blue, green). A sidebar on the right contains a list of layers and a search bar. A top navigation bar includes the AOOS logo and the text 'Arctic Portal'.

- Increase observing and forecasting capacity in all regions of the state, with a priority on the Arctic and Gulf of Alaska.

# Resources for Additional Information

- NOAA's Arctic Theme page:  
<http://www.arctic.noaa.gov/index.shtml>
- NOAA Fisheries Alaska Region:  
<http://alaskafisheries.noaa.gov/>
- NOAA Fisheries Alaska Science Center:  
<http://www.afsc.noaa.gov/>
- NOAA's Biologically Important Areas Project:  
<http://cetsound.noaa.gov/important>