

ARCTIC

NOAA's ARCTIC VISION and STRATEGY

An Overview for the Polar Research Board

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Context

- Importance of an Arctic strategy for NOAA
- Framed around science, national security, and stewardship
- Need for coordination and collaboration between partners, intended to align with other initiatives
- Global Importance of the Arctic
- Priority in President's Ocean Policy Task Force

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,
 - The global implications of Arctic change are better understood and predicted.



Guiding Principles

- Better understand the linkages between oceans and climate
- Advance implementation of EBM and CMSP
- Concentrate action in the Bering, Chukchi, and Beaufort, but be global in scope
- Enable, inspire, and engage our stakeholders
- Integrate education and outreach
- Anticipate and respond to emerging issues

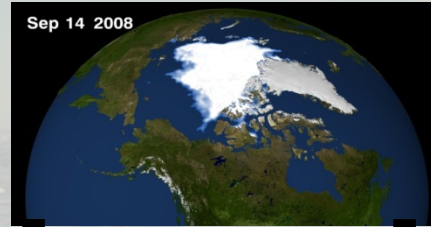
Arctic Goals

- Forecast Sea Ice
- Strengthen Foundational Science
- Improve Weather and Water Forecasts
- Enhance International and National Partnerships
- Improve Stewardship and Management of Ocean and Coastal Resources in the Arctic
- Advance Resilient and Healthy Arctic Communities and Economies



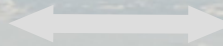
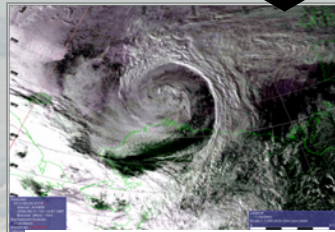
NOAA's Six Strategic Goals for the Arctic

Arctic Goals



**Forecast
sea ice
loss**

**Improve
weather and
water
forecasts**



**Detect and
understand
climate and
ecosystem
changes**

**Enhance national and international
partnerships**



**Advance resilient communities and
economies**



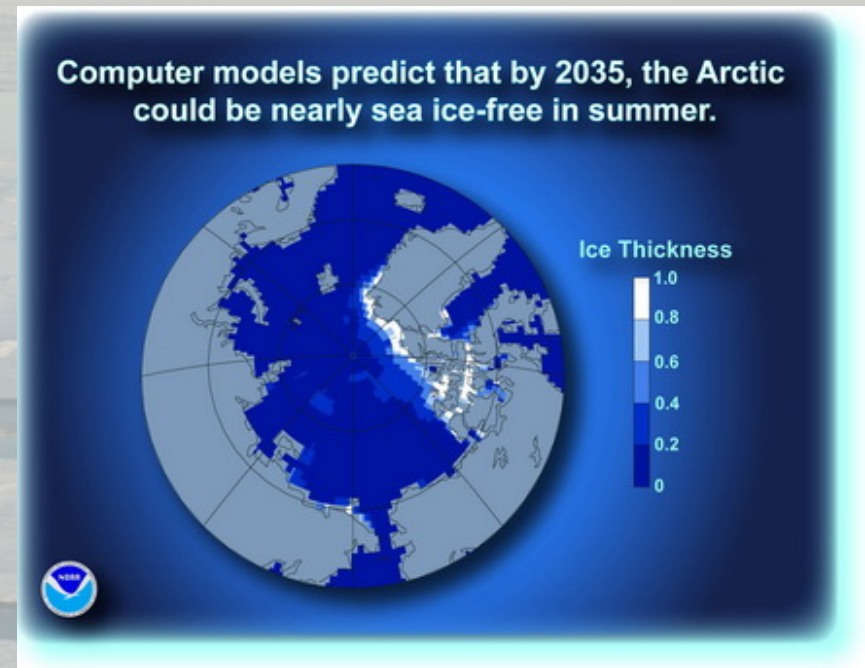
**Improve management of
ocean resources**



Goal 1: Forecast Sea Ice

Five-year Strategy

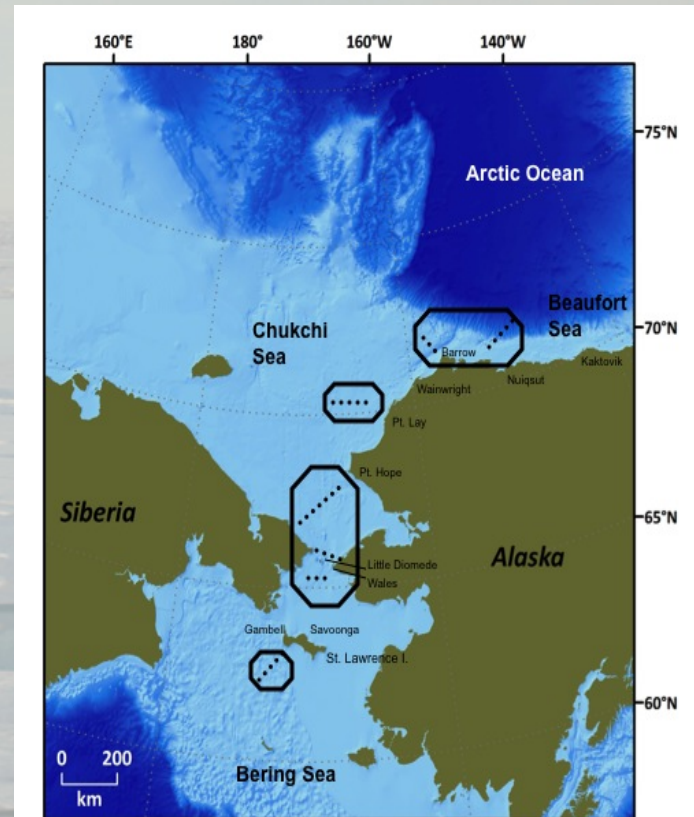
- Improve daily to weekly sea ice models and forecasts and new seasonal prediction services
- Multi-decadal sea ice projections
- Retrospective and prospective studies of the linkages between changes in Arctic sea ice and hemispheric weather and climate



Goal 2: Strengthen Foundational Science to Understand and Detect Arctic Climate and Ecosystem Changes

Five-year Strategy

- Enhanced and integrated set of ocean observations
- Rapid organization, interpretation of this data in near real time
- Water level information and forecasts



Four possible regional locations of Distributed Biological Observatory transect lines and stations



Goal 3: Improve Weather and Water Forecasts and Warnings

Five-year Strategy

- Improve Arctic marine weather, sea ice and storm forecast services.
- Protect northern and western Alaska coastal communities from storm surge, inundation, and erosion hazards.

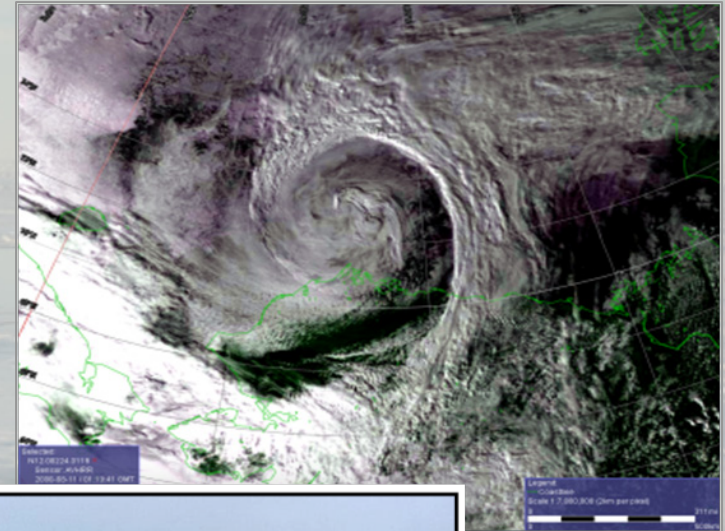


Photo 10: Shoreline erosion during coastal storm in Shismaref. (Credit: Tony Weyiouanna)



Goal 4: Enhance International and National Partnerships

Five-year Strategy

- Encourage data sharing at multiple levels among providers and users
- Expand Arctic protection mechanisms
- Provide leadership and resources to support Arctic governance and science organizations
- Support development of effective SAON process



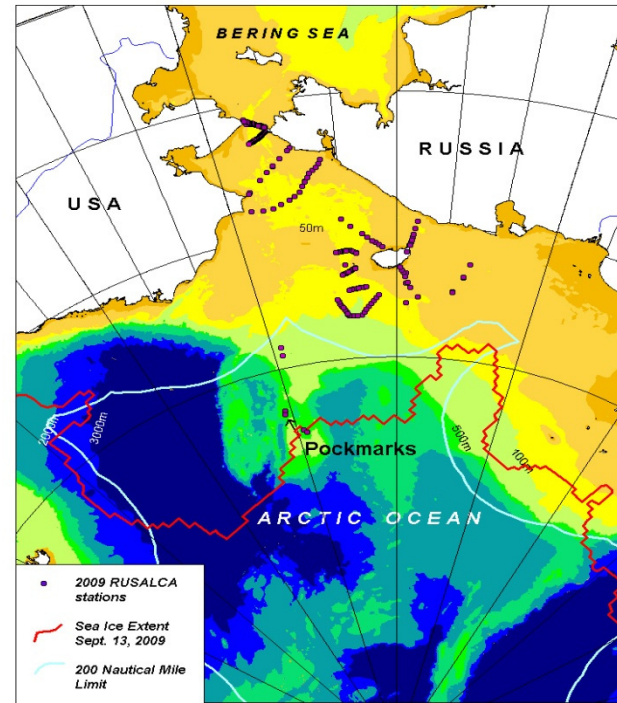
Launch of rosette during 2009 RUSALCA expedition



Goal 5: Improve Stewardship and Management of Ocean and Coastal Resources in the Arctic

Five-year Strategy

- Continue ongoing assessment programs on marine mammals, fish, and shellfish
- Expand two existing programs
 - BASIS - RUSALCA
 - NOAA's OA program



RUSALCA Ecosystem stations taken in 2009 from the Bering Strait north to 77°N on the Chukchi Plateau.

Goal 6: Advance Resilient and Healthy Arctic Communities and Economies

Five-year Strategy

- Overhaul the Arctic Geospatial Framework
- Deliver scientific support for pollution response
- Survey and map Arctic waters and shoreline
- Support coastal communities with adaptive strategies and planning tools



Photo 9: Home falling over eroded bank in Shishmaref. (Credit: Tony Weyiouanna)



Next Steps

- Request for Comment on NOAA's Arctic Vision and Strategy was published in the Federal Register on May 10, 2010.
- Develop 5-year Arctic Action Plan and formal detailed budget strategy.
- We'd like to hear from you.
- Send Comments via the FR notice, or directly to amy.holman@noaa.gov



Questions

- **And Thanks!**
- **Doug DeMaster**
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Outline

- Context
- NOAA's Arctic Vision
- Guiding Principles
- Arctic Goals and Strategy
- Next Steps
- Discussion Questions

