TRB Marine Board Spring Meeting Update on NOAA’s Arctic Plan
Ashley Chappell
NOAA Office of Coast Survey
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Outline

• Context
• NOAA’s Arctic Vision
• Guiding Principles
• Arctic Goals and Strategy
• Next Steps
• Discussion Questions
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
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

- Provide critical outcomes for other agencies and to support the National Ocean Policy
- Better understand the linkages between oceans and climate
- Advance the implementation of EBM and CMSP
- Concentrate action in the Bering, Chukchi, and Beaufort, but be global in scope

- Enable, inspire, and engage our stakeholders
- Incorporate the value of traditional and local knowledge
- Integrate education and outreach
- Incorporate new S&T developments
- Anticipate and respond to emerging issues
Arctic Goals

• Forecast Sea Ice
• Strengthen Foundational Science to Understand and Detect Arctic Climate and Ecosystem Changes
• Improve Weather and Water Forecasts and Warnings
• 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

- **Forecast sea ice loss**
- **Detect and understand climate and ecosystem changes**
- **Enhance national and international partnerships**
- **Improve weather and water forecasts**
- **Advance resilient communities and economies**
- **Improve management of ocean resources**

NOAA’s Arctic Vision and Strategy
Goal 1: Forecast Sea Ice

Goal Statement – Accurate, quantitative, daily forecasts to decadal predictions of sea ice are provided to support safe operations and ecosystem stewardship.

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

Goal Statement – Improved baseline observations and understanding of Arctic climate and ecosystems reduces the uncertainty in assessing and predicting impacts caused by a changing Arctic.

Five-year Strategy
- Form the basis for a NOAA Arctic Change Detection System with
  - Enhanced and integrated set of environmental observations
  - Rapid organization, interpretation of this data in near realtime
  - 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

Goal Statement - Advanced, accurate forecasts and warnings are provided to ensure society can prepare for and respond appropriately to weather-related routine and extreme events.

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.
Goal 4: Enhance International and National Partnerships

Goal Statement: National and international partners are engaged to promote cooperation and sharing of data, observational platforms, and intellectual resources to enable more rapid and comprehensive attainment of NOAA's Arctic science and ecosystem-based management goals.

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

Goal Statement - Conservation, stewardship, management, and use of ocean and coastal resources are based on sound science, and support healthy, productive, and resilient ecosystems and communities.

Five-year Strategy

• Continue ongoing assessment programs on marine mammals, fish, and shellfish
• Expand two existing programs
  – BASIS and RUSALCA
  – NOAA’s ocean acidification 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

Goal Statement - Resilient and healthy Arctic communities and economies through improved geospatial infrastructure, safe navigation, oil spill response readiness, and climate change adaption strategies.

Five-year Strategy

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

• Geospatial foundation essential
• NOAA working with partners to prioritize survey areas, requirements
  – Navy/Bering Strait FY10 and FY11
  – Coast Guard/Spar
• Gravity data collection
• Tide gauge demonstration project in Barrow
Current NOAA Arctic MTS Activities

- IHO/Arctic Regional Hydrographic Commission
- CMTS Arctic Integrated Action Team
- Extended Continental Shelf Surveys
- Oil Spill Response Support
Next Steps

• Request for Comment on NOAA’s Arctic Vision and Strategy was published in the Federal Register on May 10, 2010.
• Available through June 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 ashley.chappell@noaa.gov.
Discussion

• Which outcomes in this strategy are critical for your agency to succeed in fulfilling their responsibilities?
• What concerns should NOAA address in this strategy?
• What is it that NOAA can provide in terms of specific services to support your efforts?
• Where are the areas that we can collaborate to achieve our mutual goals?
## NOAA’s Arctic Tiger Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Office/Center/Natural Science Laboratory</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laura K. Furgione</td>
<td>Assistant Administrator, Office of Program Planning and Integration</td>
<td></td>
<td><a href="mailto:Laura.Furgione@noaa.gov">Laura.Furgione@noaa.gov</a></td>
</tr>
<tr>
<td>Douglas DeMaster, Ph.D.</td>
<td>Science and Research Director, Alaska Fisheries Science Center</td>
<td></td>
<td><a href="mailto:Douglas.DeMaster@noaa.gov">Douglas.DeMaster@noaa.gov</a></td>
</tr>
<tr>
<td>John A. Calder, Ph.D.</td>
<td>Climate Program Office</td>
<td></td>
<td><a href="mailto:John.Calder@noaa.gov">John.Calder@noaa.gov</a></td>
</tr>
<tr>
<td>Ashley Chappell</td>
<td>Office of Coast Survey</td>
<td></td>
<td><a href="mailto:Ashley.Chappell@noaa.gov">Ashley.Chappell@noaa.gov</a></td>
</tr>
<tr>
<td>Amy E. Holman</td>
<td>Alaska Regional Coordinator</td>
<td></td>
<td><a href="mailto:Amy.Holman@noaa.gov">Amy.Holman@noaa.gov</a></td>
</tr>
<tr>
<td>Elizabeth S. McLanahan</td>
<td>Office of International Affairs</td>
<td></td>
<td><a href="mailto:Elizabeth.McLanahan@noaa.gov">Elizabeth.McLanahan@noaa.gov</a></td>
</tr>
<tr>
<td>James E. Overland, Ph.D.</td>
<td>Pacific Marine Environmental Laboratory</td>
<td></td>
<td><a href="mailto:James.E.Overland@noaa.gov">James.E.Overland@noaa.gov</a></td>
</tr>
<tr>
<td>Tracy L. Rouleau</td>
<td>Office of Program Planning and Integration</td>
<td></td>
<td><a href="mailto:Tracy.Rouleau@noaa.gov">Tracy.Rouleau@noaa.gov</a></td>
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