Anchorage Arctic Research Day

USARC Chair, Fran Ulmer
March 24, 2017
US Arctic Research Commission:

- Develops national Arctic research policy
- Facilitates Arctic research cooperation
- Reviews federal Arctic research programs
- Recommends improvements for data sharing
- Facilitates cooperation w/Alaska & internationally
Commissioners

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6 priority goals for Arctic research

1. Environmental Change
2. Human Health
3. Energy (efficiency and renewables)
4. The “Built Environment”
5. Cultures and Community Resilience
6. International Scientific Cooperation
“Arctic Environmental Change”

- Investigate how changes in ocean temperature and carbon chemistry affect Arctic marine ecosystems, their composition and productivity, and the potential of Arctic fisheries.
“Arctic Human Health”

As Earth Warms, the Diseases That May Lie Within Permafrost Become a Bigger Worry

- Analyze the possible pathways of human exposure to contaminants and diseases passed between people and wildlife in the Arctic, and how these pathways evolve with climate change.
Federal Arctic research policy/process

USARC set goals → IARPC adopts, creates & executes research plan → White House: OMB/OSTP coordinate & review budget

“The Commission shall, after submission of the President's annual budget request, review the request and report to Congress on adherence to the Plan.”

Congress: Authorizes & Appropriates
Federal share of basic research declines
ARWSWG
Alaska Rural Water and Sanitation Working Group

The Working Group’s mission is to maximize the health benefits of in-home water and sanitation services in rural Alaska.

AMHWG
Arctic Mental Health Working Group

GROUP MISSION: to strengthen systems of care to prevent suicide and improve mental health in the circumpolar North via the promotion of indigenous knowledge, research, and evidence-based early intervention and primary prevention efforts.

AREWG
Arctic Renewable Energy Working Group

The group’s mission is to benefit Arctic communities by identifying and addressing critical renewable energy and energy efficiency research needs.
Alaska Rural Water and Sanitation Working Group

Maximize the health benefits of in-home water and sanitation services in rural Alaska

2016–2017 ARWSWG Approach

- Promote research and development of innovative approaches to water and waste-water services
- Improve village level capacity (technical, financial, managerial) and enhance existing O&M via the provision of subsidies and technical assistance programs
- Develop innovative strategies for the allocation of capital funds through community-level engagement
- Support research on the connections between climate, water and human/environmental health
Arctic Renewable Energy Working Group

Benefit Arctic communities by identifying and addressing critical research needs in renewable energy and energy efficiency

- Improve energy efficiency and explore the integration of renewable energy into village heating and electrical approaches
- Promote better understanding of the costs/benefits of renewable energy approaches at the village level
- Make village-level investment in renewable energy less risky/more attractive to industry
Arctic Mental Health Working Group

STRENGTHEN SYSTEMS OF CARE TO PREVENT SUICIDE AND IMPROVE MENTAL HEALTH IN THE CIRCUMPOLAR NORTH

- Work collaboratively with tribes and other stakeholders
- Promote use of indigenous knowledge, research, and evidence-based early intervention and primary prevention efforts.

Encourage data collection, integration, analysis and research

Promote capacity development of the mental and behavioral health workforce in Alaska

Strengthen mental health protective factors of children and youth with a focus on community-based efforts
Arctic Council

US Chairmanship Update and the Fairbanks Ministerial (May 11, 2017)
Arctic Council

- Established by the Ottawa Declaration (1996)
- Intergovernmental forum (not treaty based)
- Emphasis on sustainable development and environmental protection
Arctic Council Mandate

Promote cooperation, coordination and interaction among the Arctic States, with the involvement of Arctic indigenous communities and other Arctic inhabitants on common arctic issues, in particular sustainable development and environmental protection in the Arctic.
Permanent Participants

- Aleut Int’l Association
- Arctic Athabaskan Council
- Gwich’in Council Int’l
- Inuit Circumpolar Council
- Russian Assoc. of Indigenous Peoples of the North (RAIPON)
- Saami Council

Six heads of delegation for the indigenous permanent participant organizations of the Arctic Council. March 13, 2017. Juneau SAO meeting
Arctic Council States:
8 members, 12 observers
12 observer states

Germany
United Kingdom
France
Italy
China
Japan
Poland
The Netherlands
Spain
India
South Korea
Singapore
*EU
20 observers from inter-governmental, inter-parliamentary, and NGOs

UN Economic Comm. for Europe (1998)
Nordic Council of Ministers (1998)
Arctic Parliamentarians (1998)
Int’l Fed. of Red Cross & Red Crescent Societies (2000)
United Nations Development Program (2002)
International Arctic Science Committee (1998)
Northern Forum (1998)
International Union for Circumpolar Health (1998)
Advisory Comm. on Protection of the Seas (2000)
Association of World Reindeer Herders (2000)
Circumpolar Conservation Union (2000)
Int’l Arctic Social Sciences Association (2000)
University of the Arctic (2002)
Arctic Cultural Gateway (2004)
Arctic Council Structure

Ministers

Senior Arctic Officials (SAOs)

Working Groups

Task Force on Scientific Cooperation
Co-chairs: US, RUS

Task Force on Arctic Marine Cooperation
Co-chairs: US, NOR, IC

Arctic Monitoring and Assessment Program (AMAP)
Chair: Finland

Arctic Contaminants Action Program (ACAP)
Chair: Sweden

Conservation of Arctic Flora and Fauna (CAFF)
Chair: Norway

Protection of the Arctic Marine Environment (PAME)
Chair: Canada

Emergency Prevention Preparedness and Response (EPPR)
Chair: United States

Task Force on Arctic Telecommunications Infrastructure
Co-chairs: NOR, DK

Expert Group on Black Carbon and Methane
Chair: US

Sustainable Development Working Group (SDWG)
Chair: United States
Arctic Council reports
Agreements Adopted

• Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic

• Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic

• Agreement on International Cooperation in Scientific Research (TBD 2017)
New international science cooperation agreement

• Created via Arctic Council. US & Russia Co-Chaired.
• Legally binding. To be signed 5/11 at Fairbanks Ministerial.
• Purpose is to enhance international cooperation in scientific activities to increase effectiveness & efficiency in developing scientific knowledge about the Arctic, not to set scientific priorities. Facilitates access (people, equipment, samples, data).
• 8 Arctic nations are signatories, as with the other 2 agreements, but an article supports research w/non-parties.
• Specific articles on traditional and local knowledge encouraging use, communication, and participation.
• USARCRC designated “competent authority” as US POC.
U.S. Chairmanship Team

Chair of the Arctic Council
Secretary of State Rex Tillerson

Chair of the Senior Arctic Officials
Ambassador David Balton

U.S. Senior Arctic Official
Julie Gourley
## Chairmanship Thematic Pillars

### Arctic Communities
- Renewable Energy
- Water Sanitation and Health
- Water Resources Vulnerability Index
- Freshwater Security
- Telecommunications Infrastructure
- Suicide Prevention and Mental Wellness

### Arctic Ocean
- Search & Rescue Exercises
- Marine Environmental Protection
- Marine Protected Areas Network
- Arctic Ocean Cooperation
- Arctic Ocean Acidification

### Arctic Climate
- Short-lived Climate Pollutants
- Arctic Climate Adaptation and Resilience
- Pan-Arctic Digital Elevation Model
- Climate Indicator System
Chairmanship initiatives

- Pan-Arctic Digital Elevation Model
- Exercise of the “Marine Oil Spill Pollution Agreement”
- Rising Sun project (reducing suicide)
- Circumpolar LEO
- Water Sanitation Health (WASH)
- Search and Rescue Exercises (tabletop)
- Prevention, Preparedness, & Response in Small Communities
- Arctic Ocean Acidification
- One Health
- Arctic Climate Resilience
- Reduction of Black Carbon from Diesel Sources in Russia
- Arctic Remote Energy Atlas (AREA)
- Arctic Remote Energy Network Academy (ARENA)
- Arctic Invasive Species
- Marine Protected Areas Network
Task Force on Telecommunications Infrastructure in the Arctic (TFTIA)

Purpose: produce a report that assesses existing circumpolar telecomm infrastructure and identifies unmet communication needs for greater regional connectivity, human services, scientific observations, navigation and emergency response support.

Coordinate w/ Arctic Econ. Council’s telecomm working group
Black Carbon and Methane

- “Task Force” on Black Carbon and Methane concluded during Canadian Chairmanship, delivered an “AC Framework for Action”
- Arctic States and interested Observers submitted national reports on black carbon and methane emissions reductions to the Council.

- On 5/11/17, “Expert Group” will provide recommendations report for future voluntary action
- Then, a forum will explore collaboration on those recommendations
Arctic Ship Traffic Data

Purpose: collect and share historical data about shipping activity in the Arctic for trend analyses and related purposes.
Other Chairmanship Goals

1. Introduce new long-term priorities into the Arctic Council

2. Continue to strengthen the Arctic Council as an intergovernmental forum

3. Raise Arctic and climate change awareness within the United States and across the world
Public outreach:
“Why the Arctic Matters”

1/14/16 event in Washington, DC

Sponsored by the USARC

Over 600 attendees, in person, many more online.

Video, booklet and poster created
Fairbanks Ministerial

- May 10-11, 2017
  - 10th Ministerial since 1996
  - First US Ministerial was in Barrow (2000)

- Plenary meeting
  - Highlight achievements during the U.S. Chairmanship
  - Introduce the Finnish Chairmanship
Finland’s Chairmanship Program: 2017-2019

“Exploring Common Solutions”

Highlights two milestones related to the Arctic:

- Paris Agreement (climate)
- 2030 Agenda for Sustainable Development

Wants greater coop. w/ Arctic Eco. Council to facilitate B2B activities and econ. devel.
Priorities:
- Environmental protection
- Connectivity (telecomm networks & services)
- Meterological & oceanographic cooperation
- Education

Areas of Work of the Arctic Council:
- The Environment & Climate
- The Seas
- The People
- Strengthening Arctic Cooperation
The White House Arctic Science Ministerial
September 2016

1) Arctic Science Challenges and their Regional and Global Implications

2) Strengthening and Integrating Arctic Observations and Data Sharing

3) Applying Expanded Scientific Understanding of the Arctic to Build Regional Resilience and Shape Global Responses

4) Arctic Science as a Vehicle for STEM Education and Citizen Empowerment
CFR-sponsored Independent Task Force on U.S. Strategy in the Arctic recent report:

“Arctic Imperatives: Reinforcing U.S. Strategy on America’s Fourth Coast”

Six main goals:

• Sustain robust research funding to understand the ongoing profound changes in the region and their impact on the globe
• Ratify UNCLOS
• Fund up to six icebreakers
• Improve telecomm, energy, and other infrastructure
• Deepen work with all Arctic states, including Russia
• Support sustainable development for the people of the Arctic and further consultation with Alaska Natives

This report can be accessed via www.cfr.org/ArcticImperatives.
USARC’s daily “Arctic Update” newsletter
Subscribe at: www.arctic.gov
https://vimeo.com/187496629