

# Arctic Icebreaker Coordinating Committee (AICC) Report

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UNOLS 2016 Annual Meeting

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Arlington, VA

# AICC Current Membership

[Aguilar-Islas, Ana](#) UAF 10/15 to 10/18

[Campbell, Robert \(Chair, AICC\)](#) URI 01/16 to 01/19

[Hartz, Steve | \(RVTEC Rep, ex-officio\)](#) UAF 05/07

[Laney, Sam](#) WHOI 10/15 to 10/18

[Lomas, Michael](#) Bigelow Laboratory 08/14 to 08/17

[Persson, Ola](#) CU-Boulder 10/15 to 10/18

[Polashenski, Christopher](#) USACE-CRREL 08/14 to 08/17

[Ruppel, Carolyn](#) USGS 10/15 to 10/18

[Russell, Doug | \(RVOC Rep, ex-officio, AICC\)](#) UW 09/13

[Welker, Jeff](#) UAA 10/15 to 10/18

# AICC Meetings -2016

- \* AICC Spring Meeting, May 16, via Webex Teleconference
- \* AICC Fall Meeting, November 9 & 10, US Coast Guard Facility, Seattle, WA

# Highlights of Fall Meeting

- \* Agency reports (NSF, ONR, BOEM, USARC, CG)
- \* Alaska Eskimo Whaling Commission attended
- \* Ops, scheduling and planning for research vessels operating in the Arctic in 2017
- \* Debriefs for Healy 2016 cruises
- \* Science technical support groups
- \* Discussion on documents being developed for best practices for avoiding conflicts between researchers and subsistence hunting

# Polar Star Science Capabilities



- \* Science capabilities not currently being maintained
- \* No money to maintain, remove or recapitalize science gear
- \* Only current mission – McMurdo resupply

# USCGC Healy 2016 Schedule



- \* 02 Jul/10 Aug, Seward/Seward, NOAA/Hopcroft, HLY1601
- \* 16 Aug/17 Sep, Seward/Nome, Navy/Worcester, HLY1602
- \* 19 Sep/06 Oct, Nome/Dutch Harbor, NOAA/Mayer, HLY1603

# R/V Sikuliaq 2016 Schedule



- \* 28 Aug/8 Oct, NSF/Juranek/Sipler
- \* 14 Oct/5 Nov, ONR/Badley

# Foreign Vessels



- \* Canada, CCGS Sir Wilfrid Laurier, July 10-22
- \* Canada, CCGS Louis St. Laurent, Sept. 15 – Oct. 15
- \* South Korea, RV Araon, August
- \* Russia, (RUSALCA), RV Victor Buynitskiy, Sept. 10-30
- \* Japan, RV Mirai, Sept.
- \* China, Xuelong, Aug-Sept





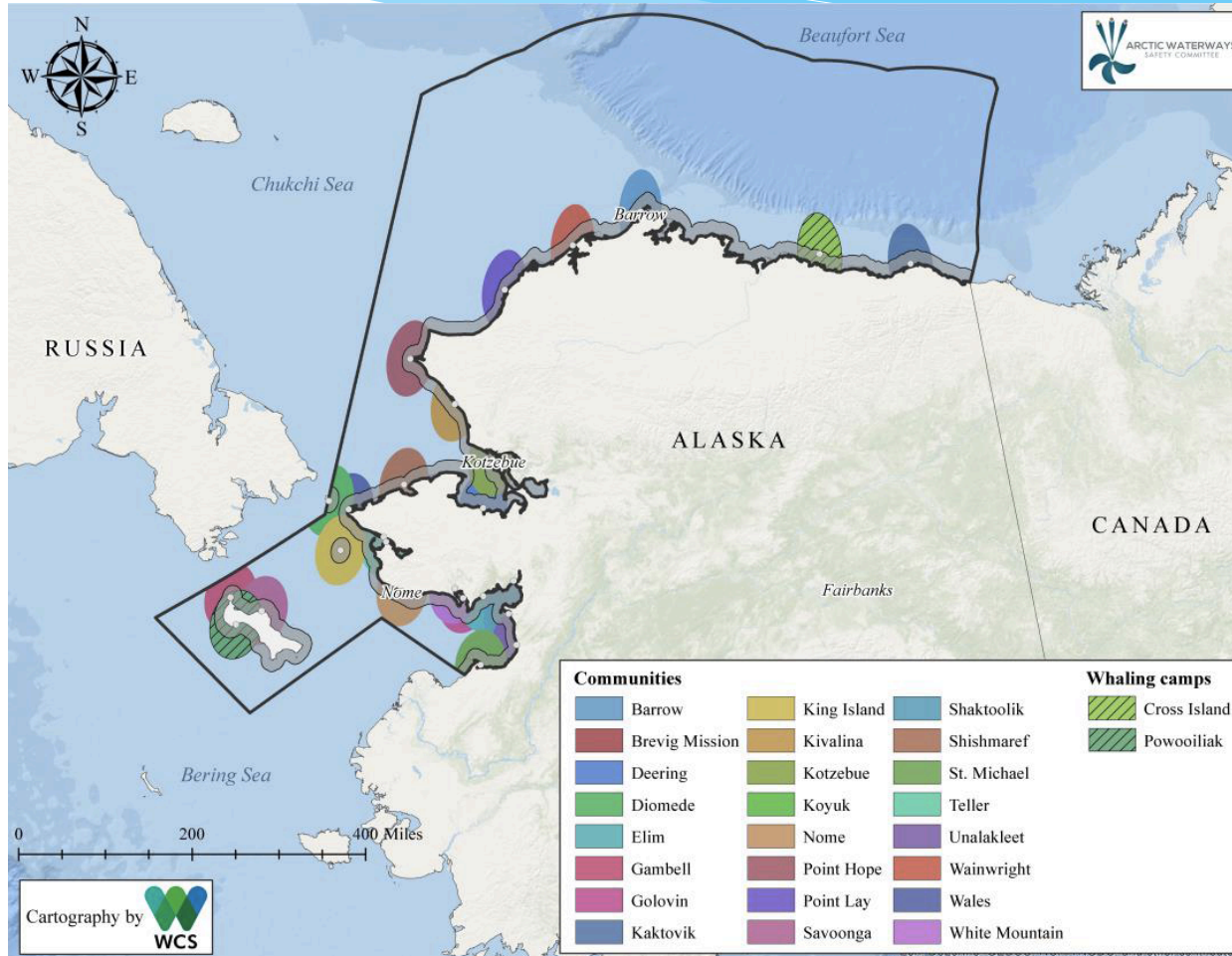
# New Heavy Polar Icebreaker (PIB)

- \* Coast Guard accelerates procurement process for new, heavy icebreaker
  - \* Request from White House in 2015 to move forward
  - \* Accelerate acquisition of replacement heavy icebreaker and planning for additional icebreakers (CG FY17 Budget - \$150M)
    - \* High Latitude Study recommends 3 heavy and 3 medium PIBs
  - \* Request made to AICC for science icebreaker needs and mission requirements
  - \* NSF does not support significant science capabilities on new, heavy PIB
  - \* Space, power and weight to complete all CG statutory missions, including science

# Reducing Conflicts Between Research Cruises and Subsistence Activities

- \* Arctic Waterways Safety Committee (AWSC)
  - \* Co-management orgs., industry, and other groups
  - \* Bring users together to define best practices to ensure a safe and predictable operating environment
  - \* Standard of Care Document for Research Cruise Operations
- \* University of Alaska Fairbanks (UAF)
  - \* Community and Environmental Compliance Standard Operating Procedures (CECSOP) for R/V Sikuliaq research operations

# Community and Subsistence Activity Locations



# Future Activities

- \* Debrief of HLY1603
- \* Provide assistance with science requirements for new, heavy PIB
- \* Develop best practices for avoiding conflicts with subsistence hunting

# Reports

## **UNOLS Report:**

**A New U.S. Polar Research Vessel (PRV): Science Drivers and Vessel Requirement (2012)**

Final report of the UNOLS PRV SMR Refresh Committee

## **National Academies Reports/Studies:**

### **Icebreaker needs**

**Polar Icebreaker Roles and U.S. Future Needs: A Preliminary Assessment (2005)**

Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs, National Research Council

**Polar Icebreakers in a Changing World: An Assessment of U.S. Needs (2007)**

Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs, National Research Council

**Science at Sea: Meeting Future Oceanographic Goals with a Robust Academic Research Fleet (2009)**

Committee on Evolution of the National Oceanographic Research Fleet;  
National Research Council

### **Polar Research Missions**

**The Arctic in the Anthropocene: Emerging Research Questions (2014)**

Committee on Emerging Research Questions in the Arctic; Polar Research Board;  
Division on Earth and Life Studies; National Research Council

**A Strategic Vision for NSF Investments in Antarctic and Southern Ocean Research (2015)**

Committee on the Development of a Strategic Vision for the U.S.  
Antarctic Program; Polar Research Board; Division on Earth and Life  
Studies; National Academies of Sciences, Engineering, and Medicine

**Arctic Matters: The Global Connection to Changes in the Arctic (2015)**

National Research Council of the National Academies

# Polar Research Vessel Update

## POLAR ICEBREAKERS

### New POLAR ICEBREAKERS (PIB):

- \* The Coast Guard held an "industry day" in March that presented the basic operational requirements of the new PIB(s) to the US shipbuilding industry. (public version of that document is provided).
- \* Note that there are some substantial scientific capabilities included in the requirements document that NSF/PLR does not support.
- \* Congress has made clear their intention that agency-specific requirements in the new PIBs need to be funded by the requesting agencies. NSF's current and projected budget is not able to support these additional capabilities and feels that science operations should be conducted by research vessels.
- \* On an as-needed basis, **a research vessel can be paired with a heavy icebreaker to operate in heavier ice conditions**. The science capabilities included in the requirements document were, in large part, placed there by NOAA.