



STUDY OF ENVIRONMENTAL ARCTIC CHANGE

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# Interagency Arctic Research Policy Committee (IARPC)

## Study of Environmental Arctic Change (SEARCH) *AGU Town Hall Meeting, 9 December 2013*

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*Chair, SEARCH Science Steering Committee*



# SEARCH Objectives

The overall objective of SEARCH is to

**Understand the nature, extent and future development of the system-scale change presently seen in the Arctic.**

**SEARCH is built around three basic elements:**

- **Observing Change** - Arctic Observing Network
- **Understanding Change** - Modeling & synthesis
- **Responding to Change** - Linking Arctic system science & stakeholder information needs

[www.arcus.org/search/](http://www.arcus.org/search/)



# What is SEARCH?

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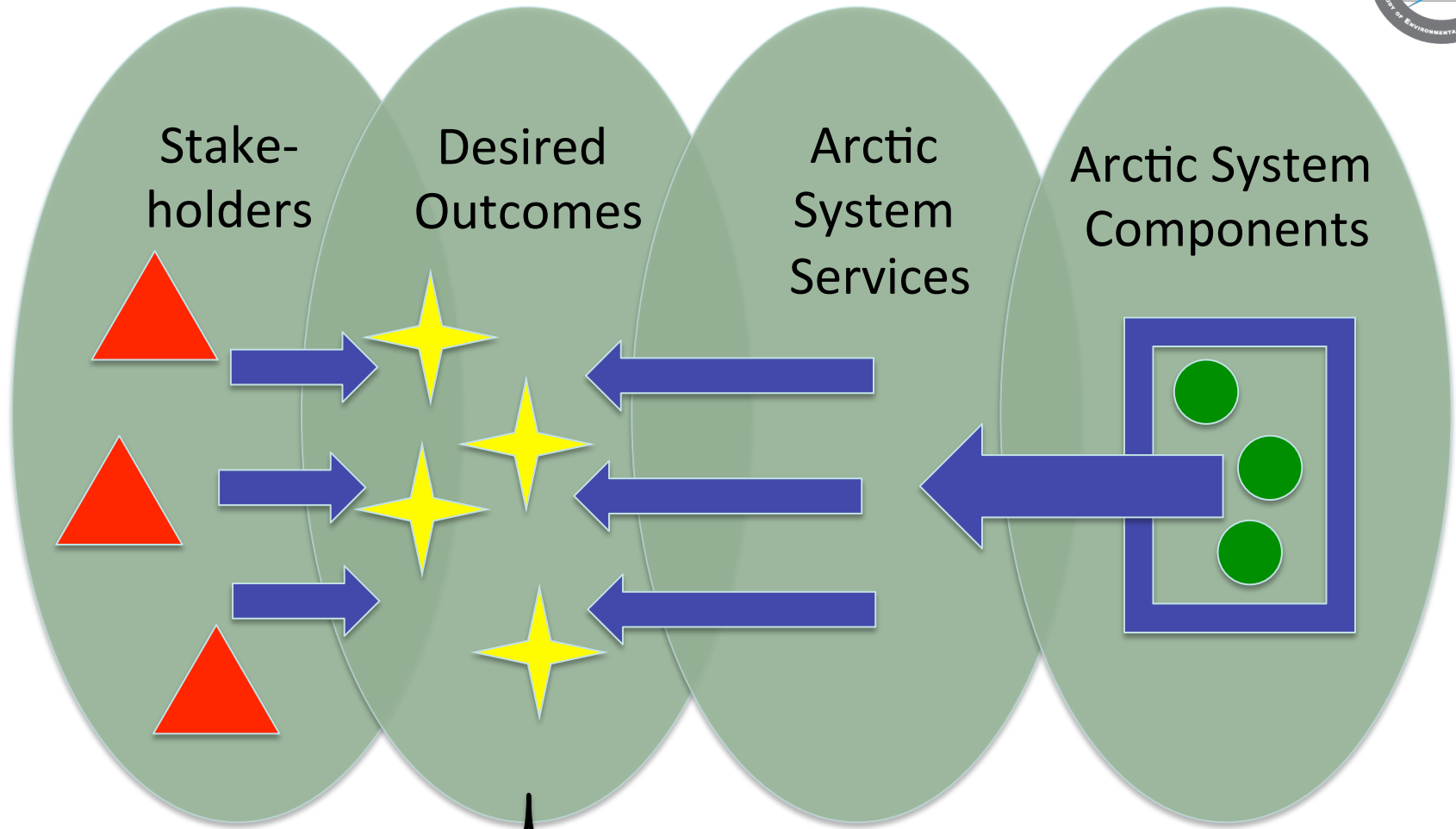
- Collaborative scientific program
- Works with academic and government agency scientists to prioritize, plan, conduct, and synthesize research focused on Arctic environmental change
- Guided by Science Steering Committee and several panels and working groups with broad representation of the research community
- ***Response of the research community to Arctic change***



# SEARCH 5-Year Goals

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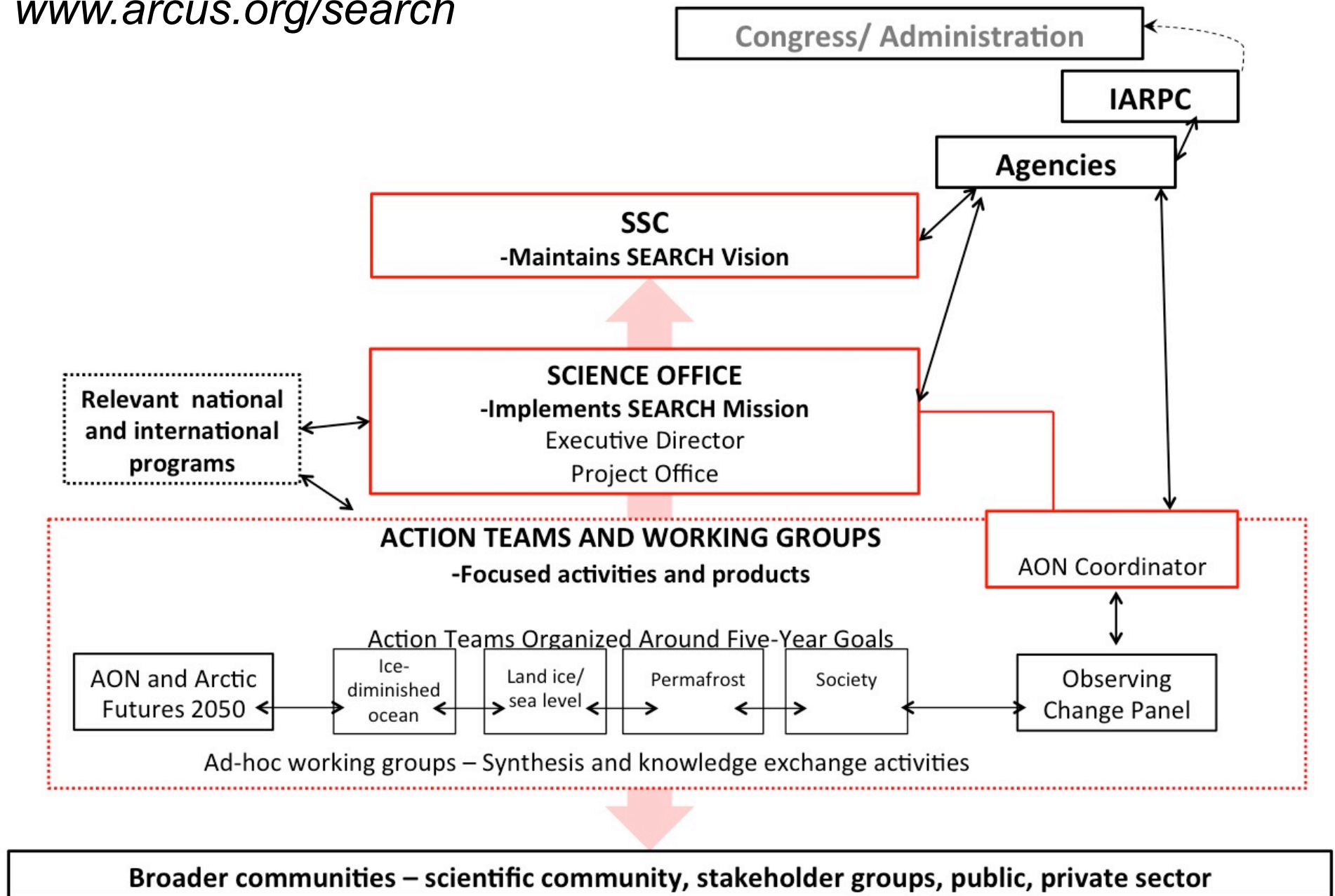
- (1) Document and Understand How Degradation of Near-Surface Permafrost Will Affect Arctic and Global Systems (*E. Schuur*)
- (2) Improve Understanding, Advance Prediction, and Explore Consequences of Changing Arctic Sea Ice (*J. Francis & H. Huntington*)
- (3) Improve Predictions of Future Land-ice Loss and Impacts on Sea Level (*F. Straneo & T. Scambos*)
- (4) Analyze Societal and Policy Implications of Arctic Environmental Change



Intersection of agency & scientific community interests  
IARPC & SEARCH

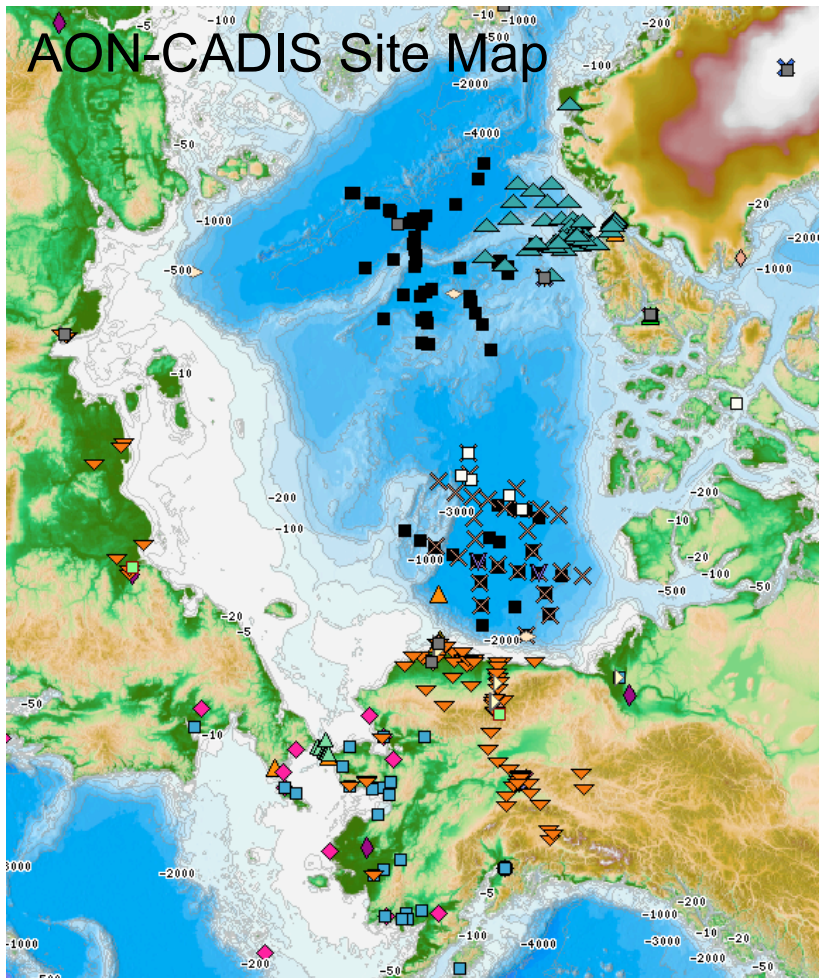
# SEARCH Structure & Activities

[www.arcus.org/search](http://www.arcus.org/search)





# Arctic Observing Network (AON)



- ~50 NSF-supported AON projects
- State of AON:
  - Disjunct observing activities by scientific community, federal/state/local agencies and stakeholders
  - Vision for integrated observing system/network emerging
  - How to catalyze cross-sector, cross-disciplinary network?
- Arctic Observing Coordination Meeting 2012: IARPC agencies & scientific community
- Arctic Observing Summit 2013 & 2014: ISAC, IASC & SAON



# Sea Ice Prediction Network (SIPN)

*SIPN builds on the Sea Ice Outlook to develop a collaborative network of scientists and stakeholders to advance research on sea ice prediction and communicate sea ice knowledge and tools.*

## Project Goals

- Coordinate and evaluate activities to predict sea ice
- Integrate, assess, and guide observations
- Synthesize predictions and observations
- Disseminate predictions and engage key stakeholders

## Network Leadership Team

- Julienne Stove, NSIDC (Project PI)
- Cecilia Bitz, U. Washington (ONR PI)
- Edward Blanchard-Wrigglesworth, UW
- Walt Meier, NASA (Co-PI)
- Jim Overland, NOAA/U. Washington
- Muyin Wang, NOAA/U. Washington
- Hajo Eicken, U. AK Fairbanks (Co-PI)
- Jenny Hutchings, Oregon State U.
- Larry Hamilton, U. New Hampshire (Co-PI)
- Helen Wiggins, ARCUS (ARCUS PI)
- Adrienne Tivy, Nat'l Research Council of Canada
- Philip Jones, Los Alamos Nat'l Lab. (DOE PI)
- Elizabeth Hunke, Los Alamos Nat'l Lab

### SIPN Town Hall Meeting

Wednesday, 11 Dec. 6:30-7:30 p.m.  
Marriott Marquis, 4<sup>th</sup> Floor, Pacific J



[www.arcus.org/sipn](http://www.arcus.org/sipn)