



# The Advisory Committee on Climate Change and Natural Resource Science (ACCCNRS)



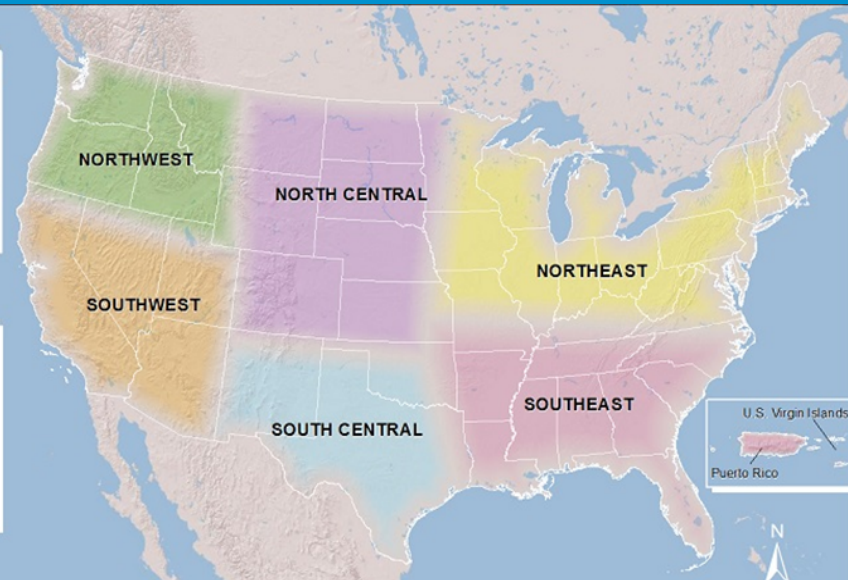
Report to the Secretary of the Interior  
on

The establishment, operations, and partnerships of the National Climate Change and Wildlife Science Center (NCCWSC) and the Climate Science Centers (CSC)

March 30, 2015

The Climate Science  
Centers

\$26.7 Million  
Annually





# ACCCNRS Membership (2013-15)

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- David Behar, Co-Chair
- Matthew Larson/Sarah Ryker, Co-Chair
- Berrien Moore, Univ of Oklahoma
- Brad Udall, Colorado State U
- Jeff Williams, Entergy, Inc.
- Gabriela Chavarria, USFWS
- Bill Hohenstein, USDA
- Richard Merrick, NOAA
- Jeff Peterson, EPA
- Bob Pietrowsky, USACE
- Kim Hall, TNC
- Paul Beier, Northern Arizona University
- Clifford Duke, Ecological Society of America
- Lara Hansen, EcoAdapt
- Noah Matson, Defenders of Wildlife
- Bruce Stein, NWF
- Lynn Helbrecht, Washington
- John O'Leary, Massachusetts
- John Sullivan, Wisconsin
- Ann Marie Chischilly, Institute for Tribal Environmental Professionals
- Gary Morishima, Quinault Nation



# Nine Recommendations to the Secretary of the Interior (2015)

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#1: The Committee recommends that the Secretary clarify that **co-production of actionable science is the core programmatic focus of the NCCWSC-CSC enterprise.**

Co-production entails more than providing tools and information in a one-way flow from the NCCWSC and CSCs to users; it includes longer-term processes and relationship building to frame questions, develop research plans, and ensure the appropriate use of information to improve management of natural and cultural resources in a changing climate.

# Recommendations to Secretary of Interior

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- #2: The Committee recommends that the NCCWSC and CSCs **prioritize the expertise and tools necessary to conduct outreach and engagement to co-produce actionable science.**
- #9: The Committee recommends that the NCCWSC use a **four-part framework for evaluating the CSCs that addresses:** (1) institutional development; (2) **actionable science**; (3) capacity building; and (4) partnerships.

# How-To Guide to Co-Production

**Beier P**, D. Behar, L. Hansen, L. Helbrecht, J. Arnold, C., Duke, M. Farooque, P. Frumhoff, L. Irwin, J. Sullivan, J. Williams (Actionable Science Workgroup of the Advisory Committee on Climate Change and Natural Resource Science). 2015. Guiding principles and recommended practices for co-producing actionable science: a How-To Guide for DOI Climate Science Centers and the National Climate Change and Wildlife Science Center. Report to the Secretary of the Interior: Advisory Committee on Climate Change and Natural Resource Science. Washington, DC.

Find at <https://nccwsc.usgs.gov/acccnrs>



## Guiding Principles and Recommended Practices for Co-producing Actionable Science:

A How-To Guide for DOI Climate Science  
Centers and the National Climate Change and  
Wildlife Science Center

Prepared by the Actionable Science Work Group  
Advisory Committee on Climate Change & Natural Resource Science (ACCCNRS)

[www.nccwsc.gov/acccnrs](http://www.nccwsc.gov/acccnrs)

# Five Guiding Principles

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1. Actionable science is most reliably co-produced by **scientists and decision makers working in concert**
2. Start with a decision that needs to be made
3. **Give priority to processes and outcomes over stand-alone products**
4. **Build connections** across disciplines and organizations, and among scientists, decision makers, and other stakeholders
5. **Evaluate** co-production products, processes, and the actionability of the science produced by projects



# Workshop: Mapping the Future for Southwest Climate Science Center

## Five Endstates in Five Years:

- A. Big Science
- B. Convener
- C. Knowledge Co-Production
- D. Climate Navigator (information)
- E. Reactive/Crisis Driven



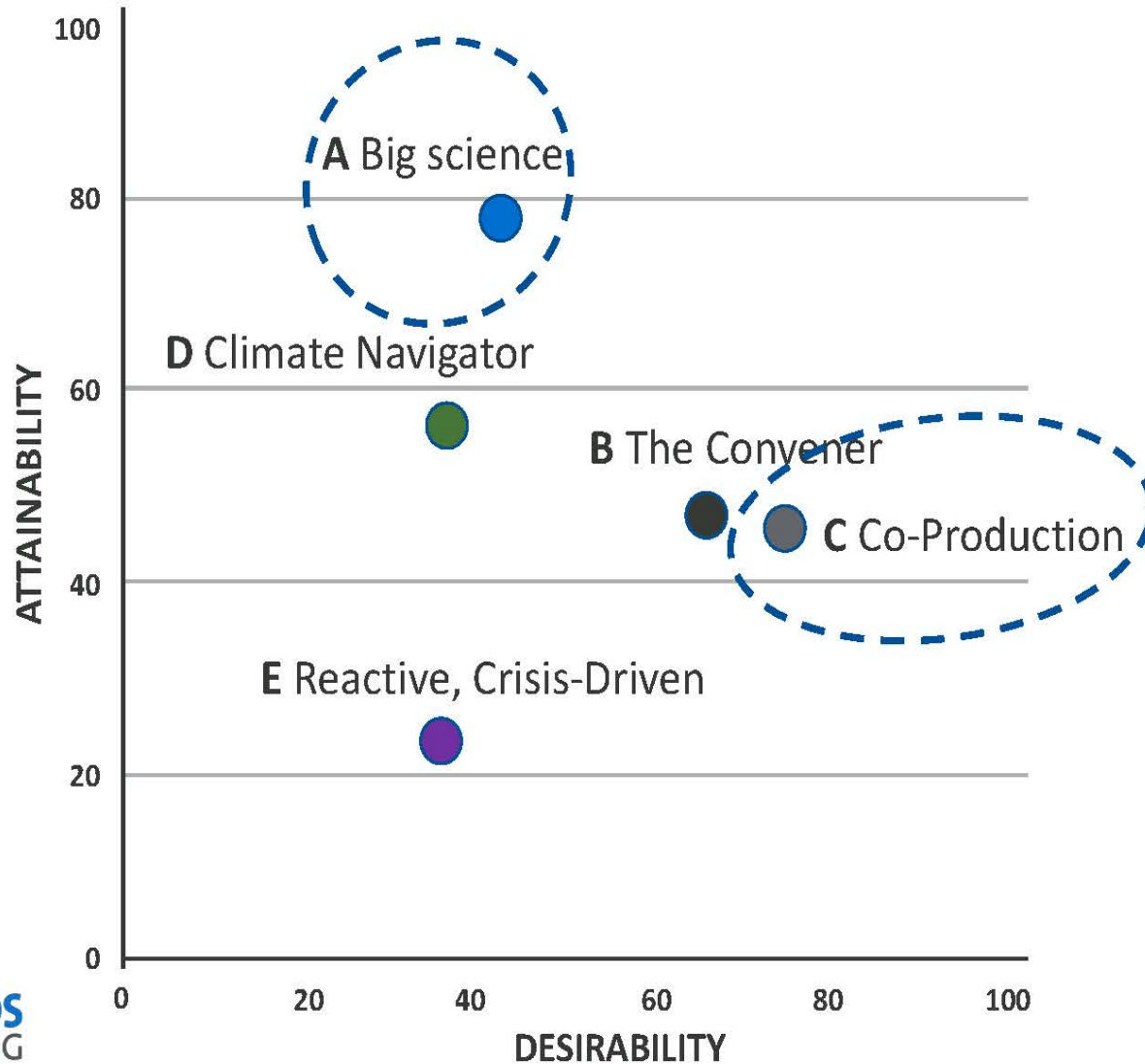
Sacramento,  
Sept 15-16,  
2015

## Participants (N=34)

A. Federal Agency:	35%
B. Boundary Org:	35%
C. Academia:	12%
D. NGO	9%
E. State/Local Govt:	9%

# Big Science vs Co-Production

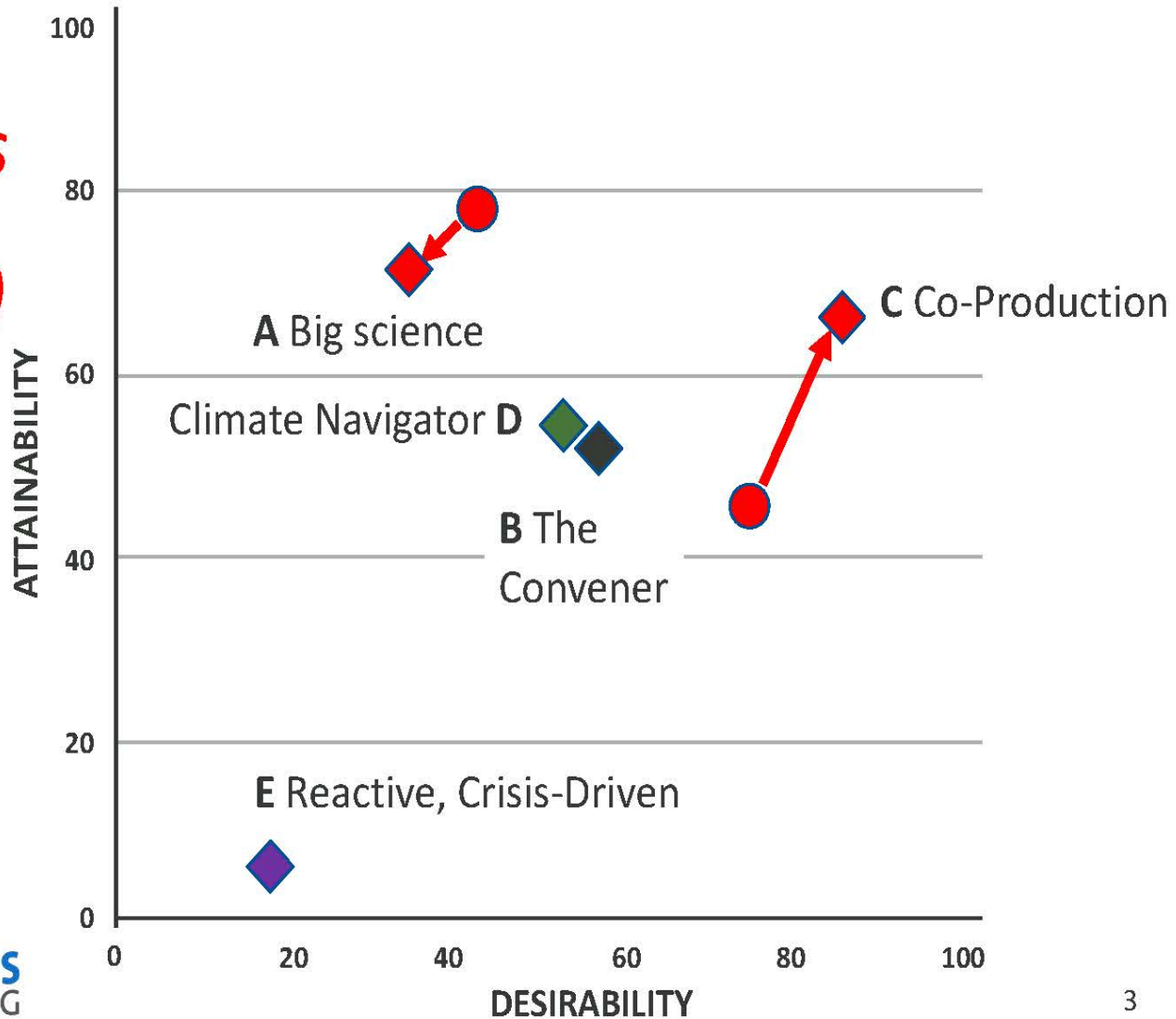
*Pre-  
Workshop  
Ranking*





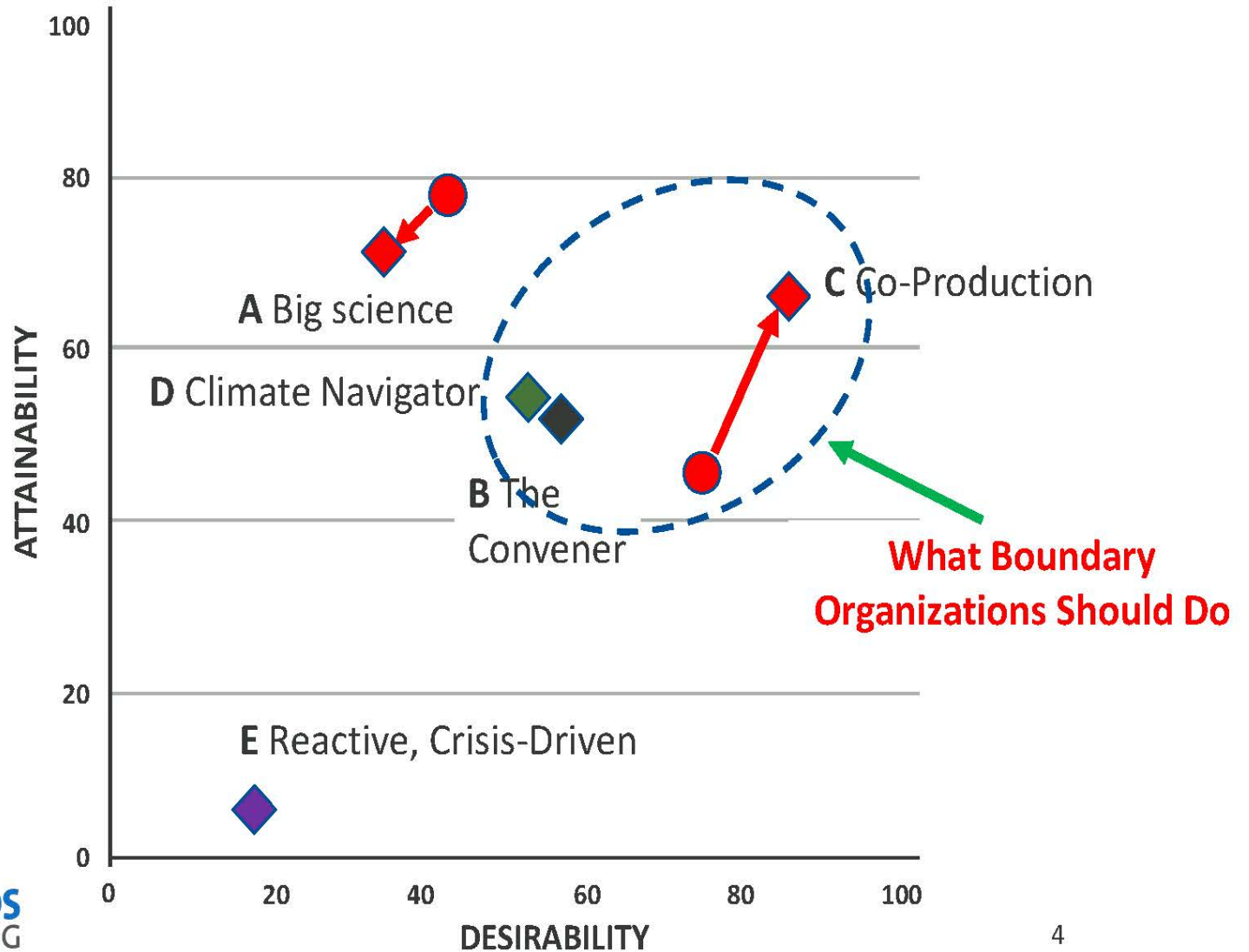
# After Two Days of Talking...

**BIG MOVERS  
(END OF  
WORKSHOP)**



# The Boundary Organization?

**BIG MOVERS  
(END OF  
WORKSHOP)**



## Excerpt, “How To Guide”

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- Co-production of actionable science is sustained when:
  - Scientists, decision-makers, and funders engage in attentive management to align the supply of actionable science with demand. Actionable science does not automatically occur whenever producers, users, and funders want it, but rather when these groups repeatedly interact in forums that are “owned” by all parties. <sup>1</sup>

<sup>1</sup> Dilling, L, and MC Lemos. 2011. Creating usable science: opportunities and constraints for climate knowledge use and their implications for science policy. *Global Environmental Change* 21:680:689

# “Actionable Science”

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## *A Newly Developed Definition:*

Actionable science provides data, analyses, projections, or tools that can support management of the risks and impacts of climate change.

It is ideally co-produced by scientists and decision makers and creates rigorous and accessible products to meet the needs of stakeholders.

Federal Advisory Committee on Climate Change  
and Natural Resource Science (ACCCNRS)

Report to the Secretary of the Interior (2015) emphasis added