



# SPARC structure and goals

# SPARC Project

- Funded by National Science Foundation as part of “Decision making under uncertainty” component
- Roger Pielke Jr., Dan Sarewitz, PIs (+other coIs)
- 5-year project, US \$2.4M total, Started 9/04
- Years 1-2, case studies on smaller programs
- Years 3-5, apply methods to Climate Change Science Program as a whole

# SPARC Partners

- University of Colorado, Boulder (Co-PI)
- Arizona State University (Co-PI)
- Colorado State University
- American Meteorological Society
- Colorado School of Mines
- Swedish Institute for Climate Science and Policy Research



Emerging  
Partners in:  
-China  
-Germany

# SPARC Goal

SPARC will conduct research and assessments, outreach, and education aimed at helping **climate science policies** better support **climate-related decision making** in the face of fundamental and often irreducible uncertainties.



# What is the connection between the two?

- In the U.S., a program of scientific research on climate has been funded for more than 15 years to provide “usable information on which to base policy decisions relating to global change.”
- In other words, one of the major societal responses to climate-related problems has been to fund scientific research, in the hope that it will support decision making.

- Each day, in the face of deep uncertainty, millions of decisions are made that respond to and influence the behavior of climate. How does the nation's multi-billion dollar investment in climate research affect those decisions? How can the societal value of this scientific investment be enhanced?

# Driving Question:

In this context, how do we know what science is “the right science” to do to address societal problems, and how do we make that science “usable”?

# SPARC components

- Research
  - Sensitivity Analysis
  - Reconciling Supply and Demand
  - Cross-cutting activities
- Outreach
- Education (mainly leveraging)



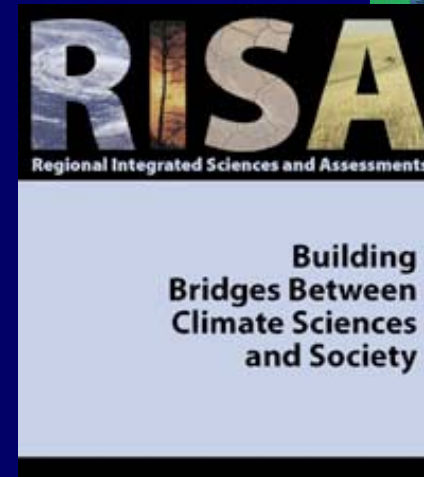
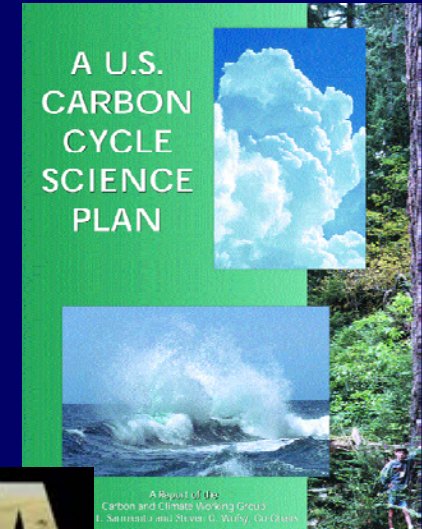
# SPARC: Sensitivity Analysis

- Ecosystem function (Dan, Netra, Mark)
  - investigate the relative magnitude of various causes of environmental change
- Extreme events (Roger)
  - investigate the relative magnitude of various causes of the growing societal impacts of weather and climate extremes
  - To be phased out of SPARC support this year



# SPARC: Reconciling Supply and Demand

- Carbon cycle science (Lisa, Nat)
  - Improve the ability of supply to meet demand by developing practical ways for setting priorities, directing science activities and building institutional capability
  - To be phased out of SPARC support this year
- Regional Integrated Sciences and Assessment (RISA) (Bets)
  - Harvesting lessons from a program deliberately aimed at connecting decision making needs with the research prioritization process



## Emerging Foci in 2007 (mid-way through SPARC)

- RSD- Climate Change Science Program (Ryan, Genevieve, Lisa)
- RSD- ADAM project (Eva, Roger)
- SA- Climate change responses in Developing Countries (Myanna)
- Outreach– plan for larger, CCSP-related workshop in 2 years? To discuss tomorrow..

# Outreach (Ami)

- Website
- Events and workshops
- Special sessions
- Listserve?
- Newsletters?

# Highlights of accomplishments so far:

- Ranking of stressors on water resources (Netra)
- Climate change and disaster losses (Roger)
- RISA Science Policy and RSD (Dan or Roger)
- “Usable” carbon science workshop (Lisa)
- ESP special issue on RSD (Roger or Dan)