

CENTER FOR SCIENCE AND TECHNOLOGY POLICY RESEARCH

The Center for Science and Technology Policy Research was initiated within the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado-Boulder in the summer of 2001 as a contribution both to the CIRES goal of "promoting science in service to society" and to the University's vision of establishing research and outreach across traditional academic boundaries.



The Center is a response to an increased demand by public and private decision makers for "usable" scientific information. Such information can serve decisions that have a scientific component or decisions about the structures, organizations, and priorities of science itself. At the same time, scientists have become increasingly interested in research problems that require the input of more than just a single traditional discipline. Science and technology policy research provides a mechanism to reconcile these two closely related - but not identical - trends. Such research focuses on "problems" and "decisions" to provide information that is useful and relevant in decision making. The focus on problems and decisions sets science and technology policy research apart from other efforts to integrate knowledge across traditional disciplines.

<http://sciencepolicy.colorado.edu>

CONSORTIUM FOR SCIENCE, POLICY & OUTCOMES

The Consortium for Science, Policy, and Outcomes is an intellectual network aimed at enhancing the contribution of science and technology to society's pursuit of equality, justice, freedom, and overall quality of life. The Consortium creates knowledge and methods, cultivates public discourse, and fosters policies to help decision makers and institutions grapple with the immense power and importance of science and technology as society charts a course for the future.



CSPO is the only intellectual consortium dedicated to understanding the linkages between S&T and its effects on society, and to developing knowledge and tools that can more effectively connect progress in S&T to progress toward desired societal outcomes. The Consortium draws on the intellectual resources of Arizona State University and other institutions for the scholarly foundation to assess and foster outcome-based policies across a broad portfolio of publicly funded scientific research. The Consortium's core commitment is to generating useable knowledge for real-world decision making.

<http://www.cspo.org/>



Science Policy Assessment and Research on Climate

Research, education and outreach to improve the ability of climate science policies to support climate-related decision making

Mid-Term Highlights 2004-2006



Science Policy Assessment and Research on Climate
UCB 488, Boulder, CO 80309-0488
Phone 303-735-0451, Fax 303-735-1576
sparc@sciencepolicy.colorado.edu
<http://sciencepolicy.colorado.edu/sparc>

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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? These are the core organizing questions for SPARC which conducts 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.



CLIMATE CHANGE AND DISASTER LOSSES



In May 2006 Roger Pielke, Jr. (SPARC Co-PI) and Peter Höpfe of the Geo Risks Research Department of Munich organized a workshop on the assessment of factors leading to increasing loss trends due to natural disasters. The workshop was timely, especially given the apparent lack of consensus on the role of climate change in disaster loss trends. The workshop brought together a diverse group of international experts in the fields of climatology and disaster research.

The general questions answered at the workshop were:

*What factors account for increasing costs of weather related disasters in recent decades?
What are the implications of these understandings, for both research and policy?*

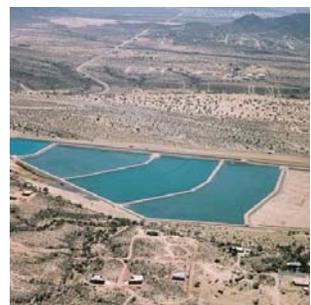
Final workshop report:

http://sciencepolicy.colorado.edu/sparc/research/projects/extreme_events/munich_workshop/workshop_report.html

SPECIAL ISSUE ON RECONCILING SUPPLY AND DEMAND

Dan Sarewitz, Steve Dovers, and Roger Pielke, Jr. guest edited a special issue of *Environmental Science & Policy* with seven papers from SPARC - affiliated authors. The issue is titled "Reconciling the Supply of and Demand for Science", with a focus on carbon cycle research. The special issue was published in 2007.

RSD Papers: http://sciencepolicy.colorado.edu/publications/special/rsd_for_science.html



RANKING OF STRESSORS ON WATER RESOURCES

As part of its ongoing effort to understand how climate change relates to other influences on society and the environment, SPARC - in collaboration with the Decision Center for a Desert City and the Consortium for Science, Policy, and Outcomes - convened a workshop in November 2006 of interdisciplinary experts to discuss the relative importance of various stressors on the water supply for the Phoenix, Arizona metropolitan area.

The Water Stressors Workshop brought together expertise relating to water supply, demand, and quality, from diverse fields such as hydrology, climatology, ecology, anthropology, chemistry, public policy, economics, and law. The goal of the workshop was to move toward an integrated understanding of the multiple factors affecting water supply and demand.

Final workshop report: <http://www.cspo.org/documents/workshopfinalreport.pdf>

RISA SCIENCE POLICY AND RSD



In August 2005, 40 scholars convened in Honolulu, Hawaii to participate in a workshop titled "Climate Science Policy: Lessons from the RISAs". The primary justification for climate research in the United States is to provide 'useful' information for decision making. The workshop explored the question:

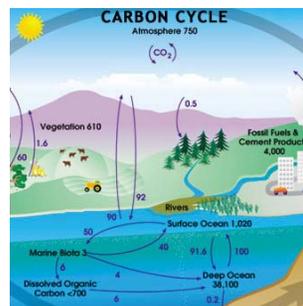
Are US climate research efforts resulting in the production of useful, and thus policy-relevant, scientific information for decision makers? In other words, are we making the right decisions about what science to conduct, and thus what scientific information to supply to decision makers?

This workshop focused on approaches to RSD in the NOAA Regional Integrated Sciences and Assessment projects as this program is widely hailed as a promising means to connect decision-making needs with the research prioritization process.

Final workshop report:

http://sciencepolicy.colorado.edu/sparc/research/projects/risa/workshop_report.html

"USABLE" CARBON SCIENCE



In June 2005, a group of researchers and practitioners across disciplines and professions gathered at the *Decision Support and Carbon Cycle Science: Practical Strategies to Reconciling the Supply of and Demand for Carbon Cycle Science Workshop* to discuss the merits of various strategies to create usable carbon science. While the focus was on carbon specifically, the group included experts on usable climate science and public participation methods in an effort to share experiences with the carbon community.

Participants discussed the following four topics:

- What are the effective criteria for successful "usable science"?
- What has worked in creating science policies that result in 'usable science'?
- How is carbon cycle science currently being used?
- Democracy, public participation and equity in setting science agendas

Final workshop report:

http://sciencepolicy.colorado.edu/sparc/research/projects/rsd/workshop_report.pdf