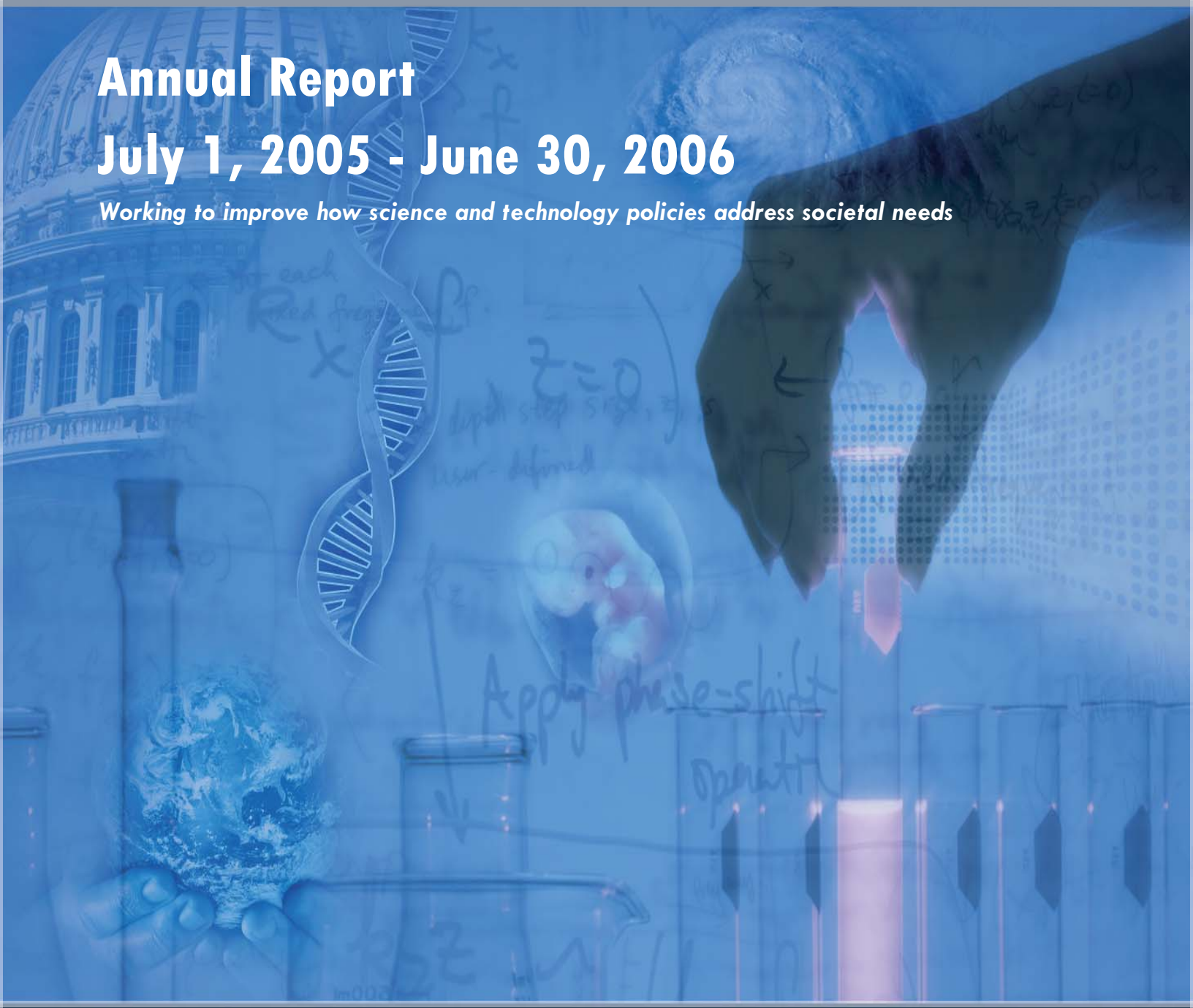
University of Colorado

Center for Science and Technology Policy Research



Annual Report
July 1, 2005 - June 30, 2006

Working to improve how science and technology policies address societal needs

Center for Science and Technology Policy Research

CIRES

NOAA

Center for Science and Technology Policy Research
FY 2005-06 Annual Report

September 1, 2006

This report was prepared by the Center for Science and Technology Policy Research within the Cooperative Institute for Research in Environmental Sciences (CIRES) with support in part from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce, under cooperative agreement NA17RJ1229 and other grants. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the National Oceanic and Atmospheric Administration, the Department of Commerce, or any other supporter of our work.

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Center for Science and Technology Policy Research
2005-06 Annual Report
Introduction

The vision of the Center for Science and Technology Policy Research is to serve as a resource for science and technology decision makers and those providing the education of future decision makers. Our mission is to improve how science and technology policies address societal needs, including research, education and service. The Center fulfills these objectives through activities within the following four **"Strategic Intents"**:

- Help guide the University of Colorado in educating the next generation of science and technology policy decision makers.
- Help make the nation's science portfolios more responsive to societal needs. Example areas include:
  - Climate and global change
  - Disasters
  - Nanotechnology
  - Biotechnology
  - Renewable/sustainable energy
- Provide various means for people with differing perspectives to discuss research and practice related to science in its broader societal context.
- Build a sustainable, diverse and productive institution at the University of Colorado-Boulder.

Message From The Director

Welcome to the Center for Science and Technology Policy Research's 2005-06 Annual Report. This report describes the Center's FY 2006 research, education, and outreach activities.

During 2005-2006 the Policy Center had several notable accomplishments. The Graduate Certificate in Science and Technology Policy was awarded to its first two recipients. One of those recipients, Shep Ryen, accepted a job offer with the staff of the House Science Committee. Our first Ph.D recipient, Erik Fisher, successfully defended his dissertation and has accepted a post-doc position at Arizona State University's Center for Nanotechnology in Society. As part of our active research program we organized workshops in Honolulu, Hawaii and Munich, Germany. We continue to publish in a wide range of peer-reviewed and popular publications. We added a new post-doc, Kevin Vranes, to our staff, and created a new position to help coordinate the Center's substantial outreach activities. Another exciting development is that the Center's weblog, Prometheus, was named one of the 50 most popular science blogs by Nature magazine and was described as an "excellent, informative site" by Science magazine.

Dr. Frank Press's April 11 visit completed our series on "Policy, Politics, and Science in the White House: Conversations with Presidential Science Advisors." Bobbie Klein, Ami Nacu-Schmidt, and Linda Pendergrass were recognized with a well-deserved award by CIRES for their role in bringing this series together. The next step will be to complete a book manuscript based on the series for publication in 2007.

But despite these successes the Center's future is somewhat uncertain. The University has shown strong support by committing two new faculty lines to the Center, which we hope to fill by fall 2007. And CIRES, our parent organization, has demonstrated consistent core support. Nevertheless, it has proven difficult to secure the balance of funding needed for the Center's core institutional functions such as web support and day-to-day administration. However, we are hopeful that we will be able to resolve these issues during the 2006-2007 academic year and continue to set the Center on a course of long-term sustainability at the University of Colorado.

In the pages that follow you will find a detailed report of out activities for 2005-2006. We hope that you will find this report to be informative. Your feedback is always welcome.

Roger Pielke, Jr., Director
pielke@colorado.edu

The Center at a Glance

The Center is within the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado at Boulder. It was founded in 2001.

For the period July 1, 2005 – June 30, 2006:

- **6,513 –** Average daily website visits for the year
- **9,753 –** Average daily website visits March – June 2006
- **2,342 –** Average daily visits to **Prometheus**, science policy weblog
- **183 –** Subscribers to **Ogmius**, Center's quarterly newsletter (as of June 30)
- **30 –** Number of publications
- **95 –** Number of media references to Center personnel
- **64 –** Number of talks by Center staff and students
- **17 –** Number of talks at or sponsored by the Center
- **9 –** Number of graduate students working at the Center

Highlights

Nanotechnology in Society

The Center entered into a collaboration this year with Arizona State University on a new National Science Foundation (NSF) project exploring the societal implications of nanotechnology. NSF awarded ASU a 5-year, $6.2 million grant under its Nanoscale Science and Engineering Program to create a Center for Nanotechnology in Society. The Center will contribute to this project by organizing a National Consensus Conference panel in Colorado to identify values intended to guide policymakers and then develop specific policy recommendations for the future development of nanotechnology. It will also help conduct exploratory research aimed at assessing the implementation of federal policies on the societal dimensions of nanotechnology at local university lab settings. The 21st Century Nanotechnology Research and Development Act, which was signed into law in December 2003, calls for the integration of research on societal concerns with nanotechnology research and development. This research will pair an "embedded humanist" with nanotechnology researchers in order to assess the feasibility of early and upstream societal engagement of research.

Presidential Science Advisor Series Adds Dr. Frank Press to Schedule, Wraps Up

The Center's lecture series, "Policy, Politics, and Science in the White House: Conversations with Presidential Science Advisors," concluded on April 11 with a talk by Dr. Frank Press, science advisor to President Jimmy Carter from 1977-1980. Dr. Press addressed a crowd of about 100 people at the University of Colorado and discussed successful and failed efforts to provide science advice to policymakers.

Kevin Vranes Joins Center

Kevin Vranes joined the Center this year as a CIRES Visiting Fellow. Kevin has been interested in the intersections of science and society since he was an undergraduate at UC Davis studying geology, water and dams. Kevin did his Ph.D. at the Lamont-Doherty Earth Observatory in physical oceanography and climatology. While at Columbia he

took policy classes at the School for International and Public Affairs and later became a Fellow of the Public Policy Consortium. In 2001 Kevin joined a team coordinated by the Center for Hazards and Risk Research and the Urban Planning program to respond to the December 1999 debris flows in the capitol region of Venezuela. This was an exploration in blending urban planning techniques with geoscience expertise to invent a broad disaster resilience plan for a large urban center. After finishing graduate school, he was selected as the 2003 - 2004 Congressional Science Fellow of the American Geophysical Union. Kevin served as legislative fellow for U.S. Senator Ron Wyden (D-OR), covering a broad array of topics including the transportation bill (S.1072 in the 108th Congress), NASA and EPA oversight, the energy bill (H.R. 6), natural hazards legislation, and abandoned mine cleanup. Kevin then spent the past year and a half in the Geology Department at the University of Montana (Missoula) as a visiting Assistant Professor where he taught undergraduate and graduate courses in geology, oceanography, climate change, and science policy. Kevin's science policy expertise is a welcome addition to the Center.

CLIMATE SERVICES CLEARINGHOUSE (G. Maricle)

Climate Services Clearinghouse, a one-stop shopping website that draws together climate services and products across sectors, from NOAA, non-NOAA government agencies, academia, and the private sector, was completed in January 2006 and is in the process of being transitioned to NOAA Climate Services.

Website: http://sciencepolicy.colorado.edu/climateservices/

COMMUNICATING ABOUT CLIMATE CHANGE (L. Dilling)

While a large majority of Americans now know and are concerned about climate change, most do not feel a sense of urgency to act on the problem.

- Why – if people know about climate change – is there no sense of urgency?
- How have communicators of climate change succeeded or failed in conveying the challenge of climate change?
- Can better communication of climate change lead to more concerted societal response to the problem, and if so, what and how should communicators talk about climate change?
- What other factors hinder or facilitate societal response and social change?

These broad questions require multi-disciplinary answers. This project therefore brings together experts in communication with those on behavior and social change. We hope to advance understanding in this crucial area of human dimensions of global change research, but also generate practically useful strategies for communicators, advocates, policy-makers, and social change agents to promote needed action to minimize and be better prepared for climate change and related hazards.

Website: http://www.isse.ucar.edu/communication/index.html

Presentations

Dilling, L., 2006. Communicating about climate change, NOAA Research Outreach Workshop, Boulder CO, 13 June.

Dilling, L., 2006. Communication about global warming, Global Warming Forum, University of Denver, 31 May.

Dilling, L., 2006. Creating a Climate for Change: What Have We Learned About Communicating About Climate Change and its Connection to Facilitating Social Change? Coping with Climate Change: A Symposium Highlighting Activities at the University of Colorado to Help Decision Makers Prepare for the Future, 4 April.

Publications

Edited volume forthcoming from Cambridge University Press (Moser and Dilling): Creating a Climate For Change: Communicating climate change and facilitating social change [anticipated publication December 2006].

Dilling, L. and Farhar, B. Making it Easy: Establishing Energy Efficiency and Renewable Energy as Routine Best Practice. In: Moser, S. and Dilling, L., eds. Creating a Climate for Change: Communicating Climate Change—Facilitating Social Change. Forthcoming from Cambridge University Press.

Also Introduction and Conclusion chapters co-authored with Susi Moser.

LESSONS IN TECHNOLOGY TRANSFER POLICY FOR THE ATMOSPHERIC SCIENCES: *A case study in Public-Private-Academic Partnership on Level II Radar Data* (J. Gratz)

Center graduate student Joel Gratz completed this policy study for the National Weather Service as his Master's thesis focusing on the NWS's national network of 158 NEXRAD WSR-88D weather radars. The government completed the installation of these radars in the early 1990s, yet it was not until the late 1990s when new technologies and organizational motivation coalesced into an opportunity to openly disseminate the Level-II radar data in real time. Level-II radar data is the highest resolution data regularly produced by the government's radar network. The study explores the development and outcomes of the current Level-II radar data dissemination system and draws three primary conclusions for leaders of the weather community: Level-II users and providers must use quantitative and qualitative measures to track the program's success and direct priorities for improvement; the use of University-based Top-Tier sites to distribute the data equates to a reliable and scalable architecture with a high level of service for clients; and the NWS should strongly consider the needs of academic and private sector users when it creates internal data and service requirements, since these two sectors are the major clients of NWS data and products.

Website: http://sciencepolicy.colorado.edu/about_us/meet_us/joel_gratz/lttpas/index.html

OUR SCIENCE, THEIR SCIENCE (M. Lahsen)

This project aims to enhance understanding of the interplay of science, culture, power and politics in international affairs through a focus on the Large-Scale Biosphere Atmosphere (LBA) experiment. The LBA is the largest program in international scientific cooperation ever focused on global change issues related to the Amazon region. It subsumes more than 120 research projects focused primarily on the Brazilian Amazon and involves some 1,700 participants, primarily from Brazil, the United States, and Europe. Interdisciplinary in nature but centrally shaped by anthropological methods and "science studies," the project studies the production and use of science under the LBA. A central part of the research involves empirical study of (1) competing scientific hypotheses related to the role of the Amazon in the global carbon cycle and hence in human-induced climate change, and (2) the connections, if any, between the competing scientific hypotheses, political frameworks, and social cohesions variously reflecting and transgressing territory-based boundaries.

Website: http://sciencepolicy.colorado.edu/our_science_their_science/index.html

Presentations

Lahsen, M., 2006. Science and Sovereignty: Power/Knowledge Inequities between North and South, presented at the Annual Meeting of the International Studies Association in San Diego, CA., 23 March.

Lahsen, M., 2006. Knowledge, Democracy and Uneven Playing Fields: Insights From Climate Politics in – and between – the U.S. and Brazil, Democracy and Knowledge Workshop, Kulturwissenschaftliches Institut, Essen, Germany, 12 April.

Lahsen, M., 2005. Science, Geopolitics and Fluid States: The Case of Deforestation in the Amazon. Invited Session, American Anthropological Association, Washington, D.C., 1 December.

Lahsen, M., 2005. The State of Climate Science and Policy in Brazil. The Swedish Institute for Climate Science and Policy Research, Söderköbing, Sweden, 19 September.

Publications

Lahsen, M. International Science, National Policy: The Politics of Carbon Cycle Science in Brazil, accepted by Climatic Change pending revisions.

Lahsen, M. and C.A. Nobre. The Challenge of Connecting International Science and Local Level Sustainability: The Case of the LBA. Environmental Science and Policy, forthcoming.

Lahsen, M., 2005. Seductive Simulations: Uncertainty Distribution Around Climate Models. Social Studies of Science 35, 895-922. Electronically available at http://sciencepolicy.colorado.edu/admin/publication_files/resource-1891-2005.49.pdf.

Lahsen, M. The Role of Unstated Mistrust and Disparities in Scientific Capacity. Report being published by The Swedish Institute for Climate Science and Policy Research, Norrköbing, Sweden, forthcoming.

Lahsen, M. How can we improve the application of scientific information to decision support related to carbon management and climate decision-making? Chapter in State of the Carbon Cycle Report: North America. Role: Co-Author. Status: First draft submitted.

Lahsen, M. Ceding Ground to Scientific Authority? Power and Perceptions of Science in the Climate Regime. Completed article manuscript to be submitted shortly to Global Environmental Change.

Lahsen, M. Knowledge, Democracy and Uneven Playing Fields: Insights from Climate Politics in – and between – the U.S. and Brazil. Completed (sent off) book chapter to appear in Is Freedom a Daughter of Knowledge? Book edited by Nico Stehr and which will be submitted shortly to Transaction Publishers.

Lahsen, M. Distrust And Participation In International Science And Environmental Decision Making: Knowledge Gaps To Overcome. Completed draft of book chapter to appear in The Social Construction of Climate Change, Mary Pettinger, ed. (under contract with Ashgate Publishing).

Lahsen, M. Armed and Tattered by Science: International Science, the Global Environment and National Sovereignty in Brazil. Completed manuscript, submitted to Cultural Dynamics for preliminary evaluation.

SCALES OF DECISION MAKING AND THE CARBON CYCLE (L. Dilling)

This project is examining the relationship of scales in carbon cycle science to scales needed for decision-making. It studies the institutions whose practices and policies influence the biospheric portion of the carbon cycle in two U.S. states—Colorado and Pennsylvania. The goal of the project is to map decision-making at federal, regional and local levels for land use in those states and how it affects carbon storage and release. The results will then be compared to the availability of scientific information at various scales to assist in informing the creation of carbon science that can be more usable.

Website: http://sciencepolicy.colorado.edu/about_us/meet_us/lisa_dilling/ccycledecisions/

Presentations

Dilling, L., 2005. "Usable" Carbon Cycle Science: Exploring the nexus of carbon cycle science and carbon management at different scales. Seventh International Carbon Dioxide Conference. Broomfield, CO, 25-29 September.

Publications

Dilling, L. Toward carbon governance: Challenges across scales in the United States. Global Environmental Politics, in press.

Science Policy Assessment and Research on Climate ("SPARC")

(R. Pielke, L. Dilling)

SPARC is a joint project of the University of Colorado's Center for Science and Policy Technology Research and the Arizona State University's Consortium for Science, Policy, & Outcomes, sponsored by the National Science Foundation (NSF). SPARC 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.

Website: http://sciencepolicy.colorado.edu/sparc/

Presentations

Dilling, L., 2006. Alternatives to the Linear Model: Implications for climate science policies. Consortium for Science, Policy and Outcomes, Arizona State University, 19 January.

Dilling, L., 2006. Carbon governance and creating usable knowledge. DISCCRS II Symposium, Asilomar Conference Center, Pacific Grove CA, 27 March.

Dilling, L., 2005. Not So Basic Anymore: The challenges of producing "use-inspired" climate science. 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Bonn, Germany, 9-13 October.

Dilling, L., 2006. Science Policy Research and Assessment on Climate: An overview and current progress. Annual Meeting of the Consortium for Research in Environmental Decision Making, Columbia University, 12 May.

Dilling, L., 2005. Tools for the New Frontier: Practice Steps to Creating Usable Science. CSTPR Seminar Series, CU-Boulder, 28 October.

Dilling, L., 2006. "Usable" Carbon Cycle Science: Creating science policies that facilitate the use of research in decision-making. Natural Resources Ecology Laboratory, University of Colorado, 27 January.

Dilling, L., 2005. "Usable" Carbon Cycle Science: the need for a new approach. 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Bonn, Germany, 9-13 October.

Dilling, L.,Fairman, D., Pielke, R.A., and King A., 2005. Science for Carbon Management: Making effective connections between users and producers of information. Invited Presentation, Climate Change Science Program Workshop: Climate Science in Support of Decision Making. Arlington, VA, 14-16 November.

Dilling, L., Maricle, G., and Pielke, Jr., R.A., 2006. Applying science policy research: The case of the carbon cycle science program. American Meteorological Society Annual Meeting, 29 January-2 February.

Dilling, L., Pielke Jr., R.A. and Sarewitz, D., 2006. Assessing science policies for climate research: New options for organizing research in support of decision making under uncertainty. American Meteorological Society Annual Meeting, 29 January-2 February.

Dilling, L., Pielke Jr, R.A. and Sarewitz, D., 2005. The missing link: Creating science policies that facilitate the use of research in environmental and water-related decision-making. American Geophysical Union Fall Meeting, 5-9 December.

Dilling L., Pielke Jr, R.A. and Sarewitz, D., 2005. Science Policy Assessment and Research on Climate. Presentation to the Climate, Science and Policy beyond 2012 (CSP 2012+) Workshop, Soderkoping, Sweden, 19-20 September.

Maricle, G., Dilling, L., Pielke, Jr. R.A. and Sarewitz, D., 2006. Science Policy Assessment and Research on Climate, Coping with Climate Change symposium, CU-Boulder, 4 April.

Pielke, Jr., R.A., 2006. Disasters and Climate Policy, Nicholas School of the Environment, Duke University, Durham, NC, 9 March.

Pielke, Jr., R. A., 2006. Normalized Hurricane Damage in the United States: 1900-2005, Workshop on Hurricane Research Priorities, National Science Board, 7 February.

Pielke, Jr., R. A., 2006. The role of societal and climate factors in historical U.S. hurricane damage, Workshop on Tropical Cyclones and Climate Change, IRI Lamont-Doherty Earth Observatory, Columbia University, 28 March.

Publications

Dilling, L. The opportunities and responsibility of carbon cycle science in the U.S. Environmental Science and Policy, in review.

Dilling, L. Towards science in support of decision making: Characterizing the supply of carbon cycle science. Environmental Science and Policy, in press.

Lahsen, M., 2005. Seductive Simulations? Uncertainty Distribution Around Climate Models, Social Studies of Science, Vol. 35, Issue 6, pp. 895-922.

Lahsen, M., 2005. Technocracy, Democracy, and U.S. Climate Politics: The Need for Demarcations. Science, Technology & Human Values, Vol. 30, No.1, pp. 137-169.

Pielke, Jr., R. A., 2005. Are there trends in hurricane destruction? Nature, Vol. 438, December, pp. E11. Brief comment on K. Emanuel's "Increasing destructiveness of tropical cyclones over the past 30 years", Nature, Vol. 436, pp. 686-688.

Pielke, R. A., 2005. Attribution of Disaster Losses (corrected version), Science, Vol. 310, December 9, pp. 1615. Response to "Attribution of Disaster Losses" by Evan Mills on pp. 1616. Publisher's correction.

Pielke, Jr., R. A., 2006. Disasters, Death, and Destruction: Account for Recent Calamities, a short essay distributed to accompany the 7th Annual Roger Revelle Commemorative Lecture, Ocean Studies Board, National Research Council of the National Academy of Sciences, held 15 March at the Baird Auditorium, Museum of Natural History, Smithsonian Institution, Washington, DC.

Pielke, Jr., R.A., 2005. Making Sense of Trends in Disaster Losses, Bridges-OST's Publication on Science & Technology Policy, Vol. 7.

Pielke, Jr., R.A., 2005. Misdefining ''climate change'': consequences for science and action, Environmental Science & Policy, Vol. 8, pp. 548-561.

Pielke, Jr. R. A., 2005. Science Academies as Political Advocates, Bridges, Volume 6, July, Office of Science & Technology at the Embassy of Austria in Washington, D.C.

Pielke, Jr., R. A., 2006. Science, Politics and Press Releases, The Albuquerque Journal, 2 April.

Pielke, Jr., R.A., 2006. The Kyoto Protocol: What Next? in K. Sparks (ed.), Encyclopaedia Britannica, 2006 Book of the Year, pp. 194-195.

Pielke, Jr., R.A., S. Agrawala, L. Bouwer, I. Burton, S. Changnon, M. Glantz, W. Hooke, R. Klein, K. Kunkel, D. Mileti, D. Sarewitz, E. Thompkins, N. Stehr, and H. von Storch, 2005.Clarifying the Attribution of Recent Disaster Losses: A Response to Epstein and McCarthy, Bulletin of American Meteorological Society, Volume 86 (10), pp. 1481-1483. Reply by P.R. Epstein and J.J. McCarthy.

Pielke, Jr., R. A., C. Landsea, M. Mayfield, J. Laver and R. Pasch, 2005. Hurricanes and global warming, Bulletin of the American Meteorological Society, 86:1571-1575.

Pielke, Jr., R. A., C.W. Landsea, M. Mayfield, J. Laver, R. Pasch, 2006. Reply to Hurricanes and Global Warming Potential Linkages and Consequences, Bulletin of the American Meteorological Society, Vol. 87, pp. 628-631.

Pielke, Jr., R.A. and D. Sarewitz, 2005. Managing the next disaster, Los Angeles Times, September 23.

Workshops

Climate Change and Disaster Losses Workshop: Understanding and Attributing Trends and Projections, 25-26 May, Hohenkammer, Germany.

Cosponsored by Munich Re Company, the GKSS Institute for Coastal Research, and the Tyndall Centre for Climate Change Research, this workshop brought together experts from around the world to summarize and address the following questions:

1. What factors account for the dramatically increasing costs of weather-related disasters (specifically, floods and storms) in recent decades?
2. What are the implications of these understandings, for both research and policy?

A report and peer-reviewed publication are in production. The Workshop Executive Summary is available at: http://sciencepolicy.colorado.edu/sparc/research/projects/extreme_events/munich_workshop/workshop_report.pdf.

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

2005 Workshop on RISA Science Policy, 15-17 August, Honolulu, Hawaii.

Our 2005 workshop brought together ~30 participants from each of the RISA teams to address questions such as the following:

1. How are stakeholders' needs reflected in the research prioritization process?
2. How are stakeholders' needs assessed and evaluated?
3. How does each RISA prioritize areas of research and assessment to which to devote its resources?
4. How does each RISA evaluate its resource allocation decisions?

The overarching goal of the workshop was to distill from the RISA projects those processes, institutions and other conditions that facilitate making decisions about climate science research priorities that lead to useful information for decision makers. We evaluated the extent to which climate science policy in the RISAs can serve as "a model that could guide some of the larger efforts within USGCRP." In addition to the workshop itself, products included a report and preparation of at least one article for submission to a peer-reviewed journal.

Website: http://sciencepolicy.colorado.edu/sparc/research/projects/risa/risaworkshop05.html

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

An ***annual meeting of SPARC team members***, organized by Lisa Dilling, was held in Boulder 12-13 December.

STATE OF THE CARBON CYCLE REPORT (SOCCR) (L. Dilling)

The State of the Carbon Cycle Report (SOCCR) is a broadly conceived activity designed to provide accurate, unbiased, and policy-relevant scientific information concerning the carbon cycle to a broad range of stakeholders. The two overarching objectives for the SOCCR are:

- To summarize scientific knowledge about carbon cycle properties and changes;
- To provide scientific information for decision support and policy formulation concerning carbon.

Website: http://cdiac.ornl.gov/SOCCR/

Presentations

Dilling, L., 2006. The State of the Carbon Cycle Report (SOCCR), Coping with Climate Change: A Symposium Highlighting Activities at the University of Colorado to Help Decision Makers Prepare for the Future, CU-Boulder, 4 April.

Publications

Dilling, L., Mitchell, R., Fairman, D., Lahsen, M., Moser, S., Patt, A., Potter, C., Rice, C., VanDeveer, S. How can we improve the application of scientific information to decision support related to carbon management and climate decision-making? In: State of the Carbon Cycle Report, North America, a Synthesis and Assessment Product of the U.S. Climate Change Science Program. Currently in technical/peer review.

Workshop

Joint Stakeholders'/Authors' Workshop 24-25 October.

Graduate Certificate Program in Science and Technology Policy

The certificate is a rigorous educational program to prepare students pursuing graduate degrees for careers at the interface of science, technology, and decision making. Upon completion of the certificate program students will have attained a measure of understanding of the broad societal context of science and technology as well as an introduction to methodologies of policy analysis that are used in decision settings related to science and technology. Ten graduate students have completed the program, and 12 students are currently enrolled. They represent the following University of Colorado departments and programs: Business, Communication, Chemical/ Biological Engineering, Computer Science, Cooperative Institute for Research in Environmental Sciences (CIRES), Environmental Studies, INSTAAR, Laboratory for Atmospheric and Space Physics (LASP), Program in Atmospheric and Oceanic Sciences (PAOS), Psychology, National Snow and Ice Data Center, and World Data Center for Glaciology. The program is now entering its 3rd year. Program alumnus are serving on the staff of the House Science Committee, interning for the second summer with the Office of Management and Budget (OMB), staffing a congressman's office, and pursuing postdoctoral positions in science policy.

Website: http://sciencepolicy.colorado.edu/stcert/

Students at the Center

The Center fulfills one of its primary purposes – education – through the active involvement of CU graduate students. The following graduate students worked with the Center over the past year. Their status is indicated.

Marilyn Averill is a Ph.D. candidate in Environmental Studies studying international environmental governance, the politics of science, and science and technology policy, particularly in the context of global climate change.

Adam Briggle, an Environmental Studies Ph.D. candidate, wrote his dissertation titled "The President's Council on Bioethics: Science, Democracy, and the Good Life." Adam recently accepted a postdoctoral position at the University of Twente, the Netherlands, with a project titled "Evaluating the Cultural Quality of New Media."

Erik Fisher graduated in May with a Ph.D. in Environmental Studies. The title of his dissertation is "Midstream Modulation: A Case Study in the Implementation of US Federal Nanotechnology 'Ethics Policy'." Erik has a fellowship to study technology assessment in the Netherlands this summer and plans to start as a post-doc at ASU jointly for the Consortium for Science, Policy, and Outcomes (CSPO) and the Center for Nanotechnology and Society (CNS).

Joel Gratz completed both his MBA and his M.S. in Environmental Studies this May. Joel hopes to stay in Boulder and to continue working for ICAT, a Boulder-based hurricane and earthquake insurance company, in a role that combines both science and business responsibilities.

Jimmy Hague is finishing up his first year in Environmental Studies with plans to graduate next May. This summer he is in London serving as the science and environment intern at the American Embassy.

Nat Logar recently passed his preliminary examinations in Environmental Studies and defended his prospectus at the end of the spring semester.

Genevieve Maricle successfully passed her comprehensive exams in March, and is now working on her dissertation titled: "Shaping Science: How to Turn Science Studies into Science Action." She was also recently appointed chair of the campus-wide Environmental Justice Initiative.

Elizabeth McNie recently defended her prospectus and is now working full-time on her dissertation titled "Co-producing useful scientific information for climate policy: Informing science policy and decision support." She will graduate in May 2007.

Shali Mohleji is working on her Ph.D, focusing on homeland security policy. She interned for her second summer at the Office of Management and Budget.

Graduate Student Internships

- **Jimmy Hague**, U.S. State Department
- **Shali Moleji**, Office of Management and Budget

The Center has employed other students over the past year to assist with vital Center functions:

- **Jamie Durfee** - undergraduate in International Affairs and French who provided general office assistance
- **Jonathan Holen** - undergraduate in Political Science and Philosophy who provided general office assistance
- **Scott Kaveny** - undergraduate in Computer Science who assisted with web and computer functions

COURSES TAUGHT BY CENTER STAFF

– **ENVS 5000 - Policy, Science, and the Environment, Fall 2005** (Roger Pielke, Jr.)
The goals of this course were to discuss issues arising at the intersection of policy, science and the environment that create challenges for effective decision making; to introduce students to conceptual tools which are useful in thinking more effectively and responsibly about any problem of policy; and to develop and practice skills using the tools to analyze the various dimensions of an issue of environmental policy.

– **ENVS 5100 - Science and Technology Policy, Spring 2006** (Roger Pielke, Jr.)
An introduction to science and technology policy research that sets the stage for improved understandings of science and technology, and their broader outcomes in society. It is the first in a 3-course sequence within the Graduate Certificate Program in Science and Technology Policy.

Outreach

The Center's outreach disseminates research and ideas through publications in both peer-reviewed and non-peer-reviewed journals, talks and presentations by Center staff and students as well as by visitors to the Center or sponsored by the Center, a newsletter (Ogmius), periodic briefings, a website, a science policy weblog (Prometheus), and extensive media coverage.

Policy, Politics and Science in the White House:

Conversations with Presidential Science Advisors

The purpose of this series, which featured current and former presidential science advisors, was to gain perspective on the role of science in policy and politics at the highest levels of government. Each presidential science advisor participated in a two-day visit to Boulder consisting of meetings with graduate students, Center staff, CU faculty and officials, and local scientists. The visits culminated in a public forum during which the advisors engaged in a dialogue with Roger Pielke, Jr. and the audience about a significant science policy issue or issues that arose during his tenure. Hundreds of people have participated in the series through these meetings and the public forums.

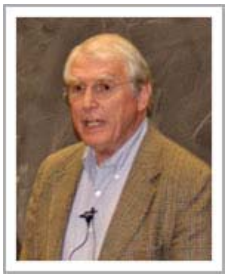
During the past year the following science advisors participated in the series:

September 12, 2005
Dr. Edward David

science advisor
to Richard Nixon 1970-73

January 31, 2006
Dr. George Keyworth

science advisor
to Ronald Reagan 1981-86



October 5, 2005
Dr. Neal Lane

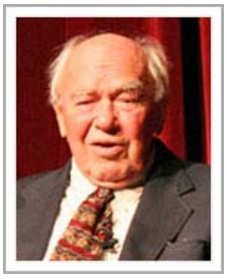
science advisor
to Bill Clinton 1998-2001

April 11, 2006
Dr. Frank Press

science advisor
to Jimmy Carter 1977-1980

October 24, 2005
Dr. Donald Hornig

science advisor
to Lyndon Johnson 1963-69



The series website includes transcripts, audio recordings, and streaming video from each talk. Additionally, Boulder's Municipal Cable Channel 8 broadcasts each talk on a monthly basis. The Center is compiling a book based on the series featuring contributions by each of the advisors who appeared in the series and chapters by other authors addressing science and technology policy issues at the federal level. Publication is expected to occur sometime in 2007.

Website: http://sciencepolicy.colorado.edu/scienceadvisors/

2005-06 PUBLICATIONS

January 1 – June 30, 2006

Fisher, E. and R. Mahajan, 2006. Contradictory intent? US federal legislation on integrating societal concerns into nanotechnology research and development, Science and Public Policy, Volume 33, Number 1, February, pp. 5-16.

Pielke, Jr., R.A., 2006. How to Break up NASA. Bridges, Vol. 10, June.

Pielke, Jr., R.A., 2006. The Kyoto Protocol: What Next? in K. Sparks (ed.), Encyclopaedia Britannica, 2006 Book of the Year, pp. 194-195.

Pielke, Jr., R.A., 2006. Science, Politics and Press Releases, The Albuquerque Journal, 2 April.

Pielke, Jr., R.A., 2006. Science Policy without Science Policy Research. Bridges, Vol. 9, April.

Pielke, Jr., R.A., 2006. Seventh Annual Roger Revelle Commemorative Lecture: Disasters, Death, and Destruction: Making Sense of Recent Calamities, Oceanography, 19:138-147.

Pielke, Jr., R.A., 2006. When Scientists Politicize Science, Regulation, Spring, pp. 28-34.

Pielke, Jr., R.A., C.W. Landsea, M. Mayfield, J. Laver, R. Pasch, 2006. Reply to Hurricanes and Global Warming Potential Linkages and Consequences, Bulletin of the American Meteorological Society, Vol. 87, pp. 628-631.

July 1 – December 31, 2005

Fisher, E., 2005. Lessons Learned from the Ethical, Legal and Social Implications program (ELSI): Planning societal implications research for the National Nanotechnology Program, Technology in Society, Volume 27, pp. 321-328.

Fisher, E., 2005. Review of Geo-Logic: Breaking Ground between Philosophy and the Earth Sciences by Robert Frodeman, Environmental Ethics, Spring 2005, Volume 27(1), pp. 97-100.

Fisher, E., 2005. Two Cultures, Encyclopedia of Science, Technology and Ethics, pp. 1988-1989.

Klein, R. and D. Kenney, 2005.Use of Climate Information in Municipal Drought Planning in Colorado. Western Water Assessment Report.

Lahsen, M., 2005. Seductive Simulations? Uncertainty Distribution Around Climate Models, Social Studies of Science, Vol. 35, Issue 6, pp. 895-922.

Lahsen, M., 2005. Technocracy, Democracy, and U.S. Climate Politics: The Need for Demarcations. Science, Technology & Human Values, Vol. 30, No.1, pp. 137-169.

Pielke, Jr., R.A., 2005. Are there trends in hurricane destruction? Nature, Vol. 438, December, pp. E11. Brief comment on K. Emanuel's "Increasing destructiveness of tropical cyclones over the past 30 years", Nature, Vol. 436, pp. 686-688.

Pielke, R.A., 2005. Attribution of Disaster Losses (corrected version), Science, Vol. 310, December 9, pp. 1615. Response to "Attribution of Disaster Losses" by Evan Mills on pp. 1616. Publisher's correction.

Pielke, Jr., R.A., 2005. Hurricanes and climate change, Letter to the Editor, The Chronicle of Higher Education, 28 October.

Pielke, Jr., R.A., 2005. Katrina interroga l'America sul gap tra scienza e politica (Italian Version). Darwin, November/December, 76-82.

Pielke, Jr., R.A., 2005. Making Sense of Trends in Disaster Losses, Bridges-OST's Publication on Science & Technology Policy, Vol. 7.

Pielke, Jr., R.A., 2005. Misdefining ''climate change'': consequences for science and action, Environmental Science & Policy, Vol. 8, pp. 548-561.

Pielke, Jr. R.A., 2005. Science Academies as Political Advocates, Bridges, Volume 6, July, Office of Science & Technology at the Embassy of Austria in Washington, D.C.

Pielke, Jr., R.A., 2005. Science Policy, in C. Mitcham (ed.), International Encyclopedia of Science, Technology and Ethics, pp. 1699-1705.

Pielke, Jr., R.A., 2005. Scienza e politica: La lotta per il consenso. (trad. di B. Giovagnoli), Laterza, Lezioni Italiane, Rome.

Pielke, Jr., R.A., 2005. Scienza nuell'uragano politico, II Sole-24 Ore, 27 November, page 36.

Pielke, Jr., R.A., 2005. Sensitivity Analysis, in C. Mitcham (ed.), International Encyclopedia of Science, Technology and Ethics.

Pielke, Jr., R.A., S. Agrawala, L. Bouwer, I. Burton, S. Changnon, M. Glantz, W. Hooke, R. Klein, K. Kunkel, D. Mileti, D. Sarewitz, E. Thompkins, N. Stehr, and H. von Storch, 2005.Clarifying the Attribution of Recent Disaster Losses: A Response to Epstein and McCarthy, Bulletin of American Meteorological Society, Volume 86 (10), pp. 1481-1483. Reply by P.R. Epstein and J.J. McCarthy.

Pielke, Jr., R.A., C. Landsea, M. Mayfield, J. Laver and R. Pasch, 2005. Hurricanes and global warming, Bulletin of the American Meteorological Society, 86:1571-1575.

Pielke, Jr., R.A. and D. Sarewitz, 2005. Managing the next disaster, Los Angeles Times, September 23.

Stewart, T., R.A. Pielke, Jr., and R. Nath, 2005. Reply to Comments on "Understanding User Decision Making and the Value of Improved Precipitation Forecasts: Lessons from a Case Study", Bulletin of American Meteorological Society, Volume 86 (10), pp. 1487-1488.

Vogel, J.M., 2005. Perils of paradigm: Complexity, policy design, and the Endocrine Disruptor Screening Program, Environmental Health: A Global Access Science Source 2005, 4:2.

A complete list of all Center publications and links to many of those publications can be found at the Center's **publications page**, http://sciencepolicy.colorado.edu/publications/.

Talks and Presentations

Center staff and students give presentations about their research and topics of interest to the science and technology policy community in the U.S. and abroad. The Center also sponsors talks at the University of Colorado, brings speakers and visitors to the Center, and hosts a Noontime Seminar Series which is an opportunity for Center staff, students, and affiliates to present and discuss their work in an informal setting. Our Speakers page contains a list of all talks given at or sponsored by the Center. When available, Powerpoint presentations and other materials are posted on the Speakers page.

Website: http://sciencepolicy.colorado.edu/outreach/center_talks.html

Carl Mitcham

Diane McKnight

Staff Presentations

Lisa Dilling

Dilling, L., R.A. Pielke, Jr. and D. Sarewitz, 2005. Science Policy Assessment and Research on Climate. Presentation to the Climate, Science and Policy beyond 2012 (CSP 2012+) Workshop, Soderkoping, Sweden. 19-20 September.

Dilling, L., 2005. "Usable" Carbon Cycle Science: Exploring the nexus of carbon cycle science and carbon management at different scales. Seventh International Carbon Dioxide Conference. Broomfield, CO, 25-29 September.

Dilling, L., 2005. "Usable" Carbon Cycle Science: the need for a new approach. 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Bonn, Germany, 9-13 October.

Dilling, L., 2005. Not So Basic Anymore: The challenges of producing "use-inspired" climate science. 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Bonn, Germany, 9-13 October.

Dilling, L., 2005. Tools for the New Frontier: Practice Steps to Creating Usable Science. 28 October.

Dilling, L., Fairman, D., Pielke, R.A., and King A., 2005. Science for Carbon Management: Making effective connections between users and producers of information. Invited Presentation, Climate Change Science Program Workshop: Climate Science in Support of Decision Making. Arlington, VA 14-16 November.

Dilling, L., Pielke Jr, R.A., and Sarewitz, D., 2005. The missing link: Creating science policies that facilitate the use of research in environmental and water-related decision-making. American Geophysical Union Fall Meeting, 5-9 December.

Dilling, L., 2006. Alternatives to the Linear Model: Implications for climate science policies. Consortium for Science, Policy and Outcomes, Arizona State University, 19 January.

Dilling, L., 2006. "Usable" Carbon Cycle Science: Creating science policies that facilitate the use of research in decision-making. Natural Resources Ecology Laboratory, Colorado State University, 27 January.

Dilling, L., Maricle, G., and Pielke, Jr., R.A., 2006. Applying science policy research: The case of the carbon cycle science program. American Meteorological Society Annual Meeting, 29 January-2 February.

Dilling, L., Pielke Jr., R.A. and Sarewitz, D., 2006. Assessing science policies for climate research: New options for organizing research in support of decision making under uncertainty. American Meteorological Society Annual Meeting, 29 January-2 February.

Dilling, L., 2006. Carbon governance and creating usable knowledge. DISCCRS II Symposium, Asilomar Conference Center, Pacific Grove CA. 27 March.

Dilling, L., 2006. The State of the Carbon Cycle Report (SOCCR), Coping with Climate Change: A Symposium Highlighting Activities at the University of Colorado to Help Decision Makers Prepare for the Future, 4 April.

Dilling, L., 2006. Creating a Climate for Change: What Have We Learned About Communicating About Climate Change and its Connection to Facilitating Social Change? Coping with Climate Change: A Symposium Highlighting Activities at the University of Colorado to Help Decision Makers Prepare for the Future, 4 April.

Dilling, L., 2006. Science Policy Research and Assessment on Climate: An overview and current progress, at the Annual Meeting of the Consortium for Research in Environmental Decision Making, Columbia University, 12 May.

Dilling, L., 2006. Communication about global warming, Global Warming Forum, University of Denver, 31 May.

Dilling, L., 2006. Communicating about climate change, NOAA Research Outreach Workshop, Boulder CO, 13 June.

Pielke, Jr., R.A., 2005. Climate Change without Hazards, Natural Hazards Annual Workshop, University of Colorado, Boulder, CO, 12 July.

Pielke, Jr., R.A., 2005. Revisiting Six Heretical Notions, Community Workshop of the United States Weather Enterprise, University of Colorado, Boulder, CO, 26 July.

Pielke, Jr., R.A., 2005. Climate science and politics in the United States 2005, CSP 2012+ Phase II – Workshop Svenskt centrum fr klimatpolitisk forskning, The Swedish Institute for Climate Science and Policy Research, 19-20 September.

Pielke, Jr., R.A., 2005. Pathologies of risk and uncertainty, 6th Open Meeting , Human Dimensions of Global Environmental Change, Bonn, Germany, 10 October.

Pielke, Jr., R.A., 2005. Shaping science for decision makers: Lessons from the RISAs, 6th Open Meeting, Human Dimensions of Global Environmental Change, Bonn, Germany, 10 October.

Pielke, Jr., R.A., 2005. IPCC: Honest Broker or Political Advocate? Understanding the Difference and Why it Matters, 6th Open Meeting, Human Dimensions of Global Environmental Change, Bonn, Germany, 11 October.

Pielke, Jr., R.A., 2005. Climate Change, Demographics and Hurricanes, GE Insurance Solutions, London, UK, 20 October.

Pielke, Jr., R.A., 2005. Disasters, Death and Destruction: Making Sense of Recent Calamities, Environmental Change Institute, Oxford University, Oxford, UK, 20 October.

Pielke, Jr., R.A., 2005. Hurricanes and global warming, Board on Atmospheric Sciences and Climate, National Research Council, 3 November.

Pielke, Jr., R.A., 2005. A perspective on research on the societal impacts of weather, WAS*IS Workshop, Institute for the Study of Society and Environment, National Center for Atmospheric Research, 6 November.

Pielke, Jr., R.A., 2005. The uneven advance of know-how in environmental policies, Workshop on the Uneven Distribution of Know-How, Columbia University, 9 November.

Pielke, Jr., R.A., D. Sarewitz and G. Maricle, 2005. Science Policy Research and Assessment, Workshop on Decision Support and Climate Science, Climate Change Science Program, Washington, DC, 15 November.

Pielke, Jr., R.A., 2005. Part One - Scientists in Policy and Politics, Lezioni Italiane Scienza e Politica. La lotta per il consenso, , University of Milan, Milano, Italy, 29 November.

Pielke, Jr., R.A., 2005. Part Two - Understanding Options for Scientists, Lezioni Italiane Scienza e Politica. La lotta per il consenso, University of Milan, Milano, Italy, 30 November.

Pielke, Jr., R.A., 2005. Part Three - Climate Change, A Case Study, Lezioni Italiane Scienza e Politica. La lotta per il consenso, University of Milan, Milano, Italy, 1 December.

Pielke, Jr., R.A., C. W. Landsea and J. Gratz, 2005. Normalized Hurricane Damage in the United States: 1900-2005, American Geophysical Union, San Francisco, 7 December.

Dilling, L., R.A. Pielke, Jr. and D. Sarewitz, 2005. The missing link: Creating science policies that facilitate the use of research in environmental and water-related decision-making, American Geophysical Union, San Francisco, 7 December.

Pielke, Jr., R. A., 2005. Communicating uncertainty, Workshop on estimating and communicating uncertainty in weather and climate forecasts, National Research Council, Washington, DC, 16 December.

Pielke, Jr., R.A., 2006. Normalized Hurricane Damage in the United States: 1900-2005, Workshop on Hurricane Research Priorities, National Science Board, Boulder, CO, 7 February.

Pielke, Jr., R.A., 2006. Complementary research needed to fully realize the value of improved (or existing) hurricane intensity forecasts, NOAA Science Advisory Board Workshop on Hurricane Intensity Research, Boulder, CO, 2 March.

Pielke, Jr., R. A., 2006. Disasters and Climate Policy, Nicholas School of the Environment, Duke University, Durham, NC, 9 March.

Pielke, Jr., R.A., 2006. Science and Technology Policy Research, Koshland Science Museum, National Academy of Sciences, Washington, DC, 15 March.

Pielke, Jr., R.A., 2006. Disasters, Death, and Destruction: Making Sense of Recent Calamities, Annual Roger Revelle Commemorative Lecture, Ocean Studies Board, National Research Council, Washington, DC, 15 March.

Pielke, Jr., R.A., 2006. Hurricanes and Global Warming: Policy and Politics, AGU Hydrology Days, Colorado State University, Fort Collins, CO, 22 March.

Pielke, Jr., R.A., 2006. The role of societal and climate factors in historical U.S. hurricane damage, Workshop on Tropical Cyclones and Climate Change, IRI Lamont-Doherty Earth Observatory, Columbia University, NY, 28 March.

Pielke, Jr. R.A., 2006. Roles for Scientists in Policy and Politics, American Association for the Advancement of Science, Washington, DC, 29 March.

Pielke, Jr. R. A., 2006. Climate Change and Coastal Development, Workshop on Climate Change and Urban Areas: US-UK Dialogue in a Policy Framework, University College, London, 3 April.

Pielke, Jr., R.A., 2006. The Role(s) of Science in Policy and Politics, State of the Rockies Conference, Colorado College, Colorado Springs, CO, 13 April.

Pielke, Jr., R.A., 2006. Roles for Scientists in Policy and Politics, Natural Resources Ecology Laboratory, Colorado State University, Fort Collins, CO, 14 April.

Pielke, Jr., R.A., 2006. Understanding Past Hurricane Damages and What to Expect for the Future, EPRI Global Climate Change Research Seminar, 1 June.

Pielke, Jr., R.A., 2006. Roles for Scientists in Policy and Politics, Institute for the Study of Society and Environment, National Center for Atmospheric Research, Boulder, CO, 6 June.

Pielke, Jr., R.A., 2006. Understanding the Dynamics of Climate Politics, Climate Change and the American West: Legal and Policy Dimensions, Natural Resources Law Center, university of Colorado, 9 June.

Pielke, Jr., R.A., 2006. Climate Change and Extreme Events, Potsdam Institute for Climate Impact Research, Potsdam, Germany, 26 June.

Pielke, Jr., R.A., 2006. Climate Change and Extreme Events, Max Planck Institute for Meteorology, Hamburg, Germany, 27 June.

Pielke, Jr., R.A., 2006. Institutions and Knowledge Provision: Reconciling the Supply of and Demand for Science, Workshop on Markets, Institutions, and Innovation-Related Services, HWWA Hamburger Weltwirtschaftsarchiv, Hamburg, Germany, 29 June.

Graduate Student Presentations

Marilyn Averill

Averill, M., 2005. Climate Litigation: EPA Authority to Regulate Greenhouse Gas Emissions, Center for Science and Technology Policy Research Noontime Seminar Series, 22 September.

Averill, M., 2006. My experiences at the eleventh session of the Conference of the Parties to the Climate Change Convention, Center for Science and Technology Policy Research Noontime Seminar Series, 23 January.

Averill, M., 2006. Climate Litigation: Democratic Participation, and Civic Education, Western Political Science Association's Annual Meeting, 19 March.

Averill, M., 2006. Climate in the Courtroom, Coping with Climate Change: A Symposium Highlighting Activities at the University of Colorado to Help Decision Makers Prepare for the Future, 4 April.

Adam Briggle

Briggle, A., 2006. President's Council on Bioethics, Center for Science and Technology Policy Research Noontime Seminar Series, 20 February.

Briggle, A., 2006. An Evaluation of the President's Council on Bioethics, 2006 Midwest Political Science Association, Chicago, 22 April.

Erik Fisher

Fisher, E., 2006. Integrating Societal Concerns into Nanotechnology: From Upstream Engagement to Midstream Modulation, Center for Science and Technology Policy Research Noontime Seminar Series, 20 March.

Fisher, E., 2006. Integrating Societal Concerns into R&D: The Midstream Modulation of Nanotechnology, National Institute of Standards and Technology, Boulder, 19 April.

Joel Gratz

Gratz, J., 2005. Climate Change, Demographics, and Hurricanes. Natural Hazards Center Hurricane Katrina Symposium, 21 October.

Nat Logar

Logar, N., 2006. Missed opportunities, mischaracterization, and useable science: The Agricultural Research Service's Global Change National Program, 2006 Graduate Student Conference on Science and Technology in Society, 22 April.

Genevieve Maricle

Maricle, G., 2006. Science Policy Assessment and Research on Climate, Coping with Climate Change: A Symposium Highlighting Activities at the University of Colorado to Help Decision Makers Prepare for the Future, 4 April.

Elizabeth McNie

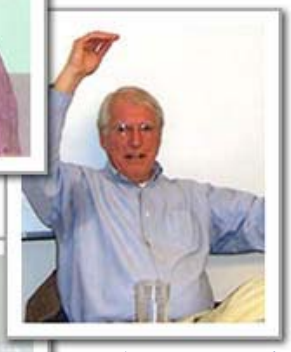
McNie, E., 2005. Climate change, experiential education and teenagers: Lessons learned from my summer exploring Iceland, Greenland, and Nunavut with 'Students on Ice'", Center for Science and Technology Policy Research Noontime Seminar Series, 7 September.

OTHER TALKS AT OR SPONSORED BY THE CENTER

- Hans von Storch, 2005. Hockey Sticks, the tragedy of the commons and sustainability of climate science, 8 July.
- Dr. Edward David, 2005. Science advisor to President Richard M. Nixon, 12 September.
- Diana Josephson, 2005. Becoming proactive through strategic planning, 15 September.
- Carol Byerly, 2005. Finding the Flu: Explaining the Silence Regarding Influenza Epidemic of 1918, 26 September.
- Dr. Neal Lane, 2005. Science Advisor to President Bill Clinton, 5 October.
- Peggy Lamm, 2005. Why in the world would any sane person run for public office, 17 October.
- Dr. Donald Hornig, 2005. Science advisor to President Lyndon Johnson, 24 October.

- Juan Lucena, 2005. Changing policies for the promotion of science and engineering education at NSF, 14 November.
- Hans von Storch, 2005. Research collaborations related to climate modeling (for policy) & extreme events, 18 November.
- Carl Mitcham, 2005. What are the Connections between Science Policy and Ethics?, 28 November.
- Rudy Juliano, 2006. UNC's Dept. of Pharmacology, Roundtable Discussion: building a science policy program, 26 January.
- Dr. George Keyworth, 2006. Science advisor to President Ronald Reagan, 31 January.
- Steve Quane, 2006. Peak Oil and the Struggle for Sustainable Energy: A Congressional Staffer's Perspective, 23 February.
- Diane McKnight, 2006. Climate change, acid mine drainage, mountain sports in Colo Rocky Mtns, 13 March.
- Krister Andersson, 2006. Municipal Politics and Forest Governance: Comparative Analysis in Bolivia & Guatemala, 3 April.
- Dr. Frank Press, 2006. Science advisor to President Jimmy Carter, 11 April.
- Jerry Peterson, 2006. A nuclear option for a hydrogen economy, 17 April.
- Martijntje Smits, 2006. Taming Monsters. The cultural domestication of new technology, 20 April.

Carol Byerly



Dr. George Keyworth

Peggy Lamm

Ogmius

Each issue of the Center's quarterly newsletter, Ogmius, features an opinion by a leading voice or voices in the science and technology policy field on important issues. The lead articles over the past year have been:

- Science Policy: The Victim of Partisan Politics, by Robert Palmer, Democratic Chief of Staff for the House Committee on Science, 1993 – 2004
- Katrina, Acts of God, and Acts of People, by Roger Kennedy, former Director, National Park Service
- Science Policy: The year ahead, by David Goldston, current Republican Chief of Staff for the House Committee on Science
- Reproductive medicine, politics and religion in Italy: Reflections on the 2005 referendum, by Gilberto Corbellini, Università di Roma "La Sapienza"

Ogmius also includes a research highlight, as well as Center news and information of interest to the S&T policy field. Current and past issues of Ogmius are available online and in pdf format. Ogmius has 181 subscribers from institutions such as Arizona State University, Harvard, Cornell, Princeton, Rutgers, Tufts, UC - Davis and San Diego, the University of Chicago, private industry, USAID, NOAA, US Army Corps of Engineers, Lawrence Livermore Laboratory, state agencies in Arizona, Colorado, New York, Texas, Washington, and Wisconsin, organizations such as AAAS, Red Cross, and Pew, as well as from Australia, Canada, India, Japan, New Zealand, and the UK.

Website: http://sciencepolicy.colorado.edu/ogmius/

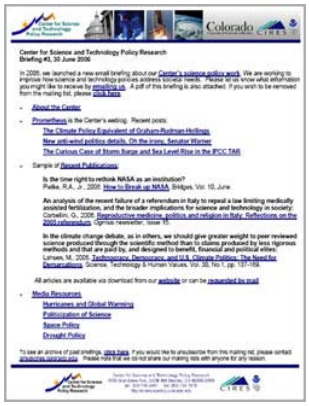
PROMETHEUS

In 2004, the Center added Prometheus: The Science Policy Weblog to its outreach efforts. Prometheus began as a class project of the Center's Shep Ryen and was designed to present a forum for science policy news and commentary, as well as public comment and discussion. The site provides a useful service to the science policy community, and has been cited as one of the top 50 science blogs by *Nature* in 2006. Prometheus entries have been cited in the Washington Times, EU Reporter, and by UPI. Prometheus was referenced in a 20 April 2006 National Geographic News article on blogs being a tool for science, and was characterized as an "excellent, informative site" in the 14 April 2006 Policy Forum in Science. The daily average number of visitors to Prometheus has been 2,342. Recent topics include the following:

- Evaluating Jim Hansen's 1988 Climate Forecast
- A Few Reactions to the Bonn Dialogue on the FCCC
- Science Studies: Cheerleader, Marketer, or Critic?
- Scientific Communication and the Public Interest
- 11,000 Deaths a Day, Page 8, Ho Hum

Website: http://sciencepolicy.colorado.edu/prometheus/

BRIEFINGS



In March 2006, the Center launched the first issue of a new email briefing about its science policy work. Each briefing contains examples of recent Prometheus entries and publications. The email is sent to over 2,000 science and technology policy decision makers in Washington, D.C., and around the world, and is also posted on the Center's website.

Website: http://sciencepolicy.colorado.edu/outreach/cstpr_briefings.html

SCIENCEPOLICY WEBSITE

The Center makes extensive use of the Internet for its outreach activities. Each project listed above has its own unique web page. The following is a sample of additional pages on the site:

Speakers page

http://sciencepolicy.colorado.edu/outreach/center_talks.html

Provides a list of all past and upcoming speakers, dates and titles of their talks, and presentations, if available.

SPGrads

http://sciencepolicy.colorado.edu/sp_grads/

The SPGrads site is for graduate students and early-career scientists interested in issues of science and technology policy. The site includes the SPGrads listserv, an email forum, and information on past and upcoming events.

Science & Technology Jobs

http://sciencepolicy.colorado.edu/students/jobs.html

Links to pages with science and technology policy jobs, internships, fellowships, etc.

Science & Technology Policy Education at CU

http://sciencepolicy.colorado.edu/students/st_education_at_cu.html

Links to science and technology policy related programs and classes at the University of Colorado.

Science & Technology Policy Education elsewhere

http://sciencepolicy.colorado.edu/students/st_studies_prgs.html

Links to educational institutions other than those at the University of Colorado, as well as to science and technology studies programs.

Science and Technology Organizations and Centers

http://sciencepolicy.colorado.edu/students/st_organizations.html

This page provides links to S&T organizations, and centers around the country.

Media Resources

http://sciencepolicy.colorado.edu/outreach/media_resources/

This page provides the media and other interested readers with links to Center resources on selected topics such as space policy, hurricanes and global warming, politicization of science, and drought policy.

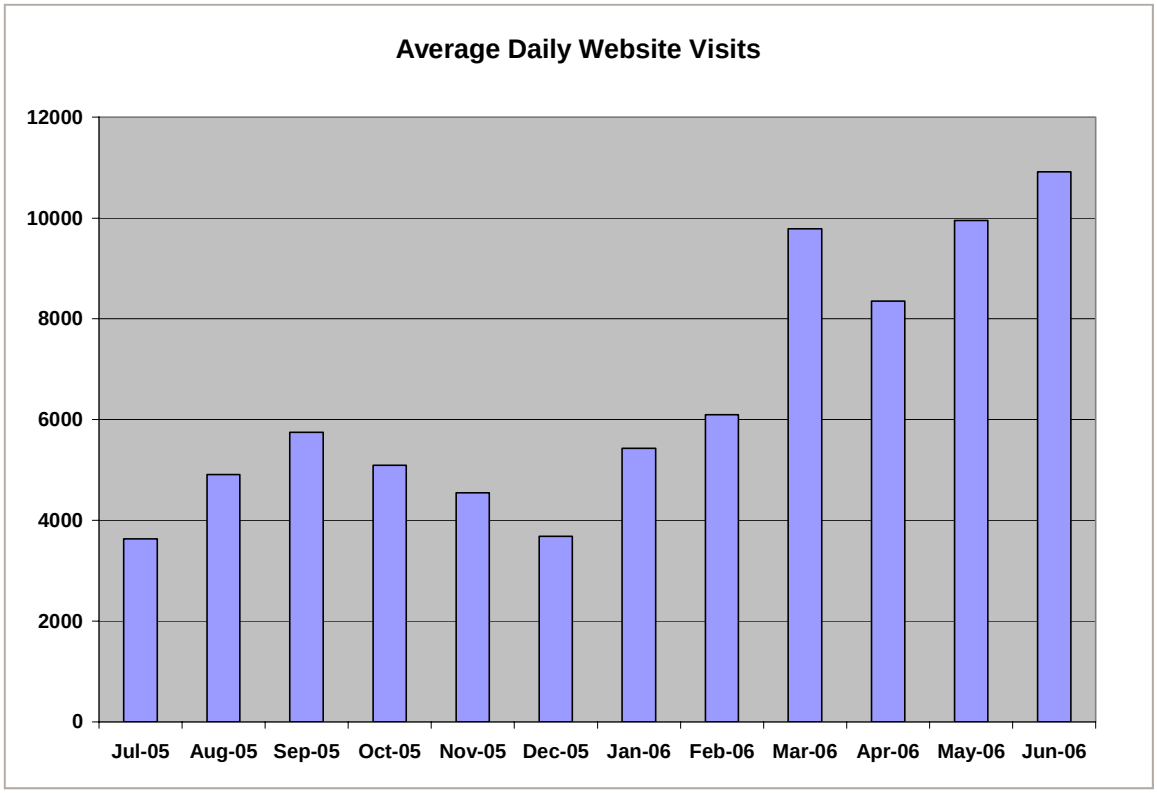
Extreme Weather Sourcebook 2001

http://sciencepolicy.colorado.edu/sourcebook/

The Extreme Weather Sourcebook 2001 Edition is a source of economic and other societal impacts related to hurricanes, floods, tornadoes, lightning, and other U.S. weather phenomena.

Website Visits

In March, May, and June 2006, an average of approximately 10,000 people visited the Center's website (sciencepolicy.colorado.edu) each day. Website traffic has grown steadily since the Center's inception. Our site received an average of 325 unique visitors per day in 2002, approximately 750 visitors per day in 2003, 1,000 visitors per day in 2004, and approximately 2,800 visitors in 2005. The following graph shows the daily average number of visitors to our website over the past year:



Media Coverage

Since opening in the fall of 2001, Center staff and projects have been referenced by the following media:

Aerospace America Magazine
AFP
Against the Grain
Albuquerque Journal
American Prospect
Arkansas Democrat Gazette
Associated Press
Audubon Magazine
Baltimore Sun
BBC Radio
Boston Globe
Capital Times
China Daily
Christian Science Monitor
Chronicle of Higher Education
Colorado Daily
Colorado Springs Gazette
Colorado Springs Independent
Daily Camera
Daily Utah Chronicle
Dallas Morning News
Denver Business Journal
Denver Post
Der Spiegel
Discover Magazine
Discovery Channel
Drug Development and Discovery
The Economist
EOS
EU Reporter
Financial Post
Financial Times
Forbes
Fort Collins Coloradoan
Fortune
Fox News
Galileo (Italy)
Greenwire
Guardian
Houston Chronicle
IEEE Spectrum
Il Messaggero (Italy)
Insure.com
Jackson Hole News and Guide
Journal of Young Investigators
Kansas City Star
KCPW Radio
KMGH Channel 7 news
KNUS Radio
KOA Radio
Kristeligt Dagblad (Denmark)
LA Times
Longmont Daily Times-Call
Marketplace Radio
Miami Herald
Minnesota Public Radio
MSNBC
Naples Daily News
Nashua Telegragh
National Geographic News
National Journal
National Public Radio
National Review
Natural Hazards Observer
Nature
New Orleans Times-Picayune
New York Times
On Point
Pacifica Radio
Philadelphia Inquirer
Pittsburgh Post Gazette
Rocky Mountain News
San Francisco Chronicle
Santa Fe New Mexican
Sarasota Herald Tribune
Science
Scientific American
The Scientist

Scripps-Howard News Service
Seed Magazine
SETI Radio Network
Spectrum
St. Petersburg Times
Sun Herald
Swedish Public Radio
The Times
The Times-Picayune
Travel Weekly
The Trumpet
UCAR Quarterly
UPI
USA Today
Utah Public Radio
Wall Street Journal
Washington Observer
Washington Post
Washington Times
Weekly Standard
Westword
Wisconsin Technology Network

Media References

The following media references to Center personnel, affiliates or projects appeared in 2005-2006:

- Roger Pielke, Jr. was quoted in a 29 June 2006 Denver Westword article on the global warming debate.
- Roger Pielke, Jr. was quoted in a 26 June 2006 Rocky Mountain News article on the recent NCAR hurricane analysis.
- Roger Pielke, Jr. was quoted in a 23 June 2006 LA Times article on NRC's "Hockey Stick" report.
- Roger Pielke, Jr. was quoted in a 10 June 2006 Daily Camera article on implementing climate programs in western states.
- Roger Pielke, Jr. was quoted in a 7 June 2006 Nature article on trends in disaster losses and climate change.
- Roger Pielke, Jr.'s work on hurricanes was discussed in a 1 June 2006 Nature story on hurricanes and climate change.
- Roger Pielke, Jr. was quoted in a 1 June 2006 Rocky Mountain News article about upcoming hurricane season.
- Center affiliate Dan Sarewitz cited in June 2006 Physics Today article on science policy and the government.
- Roger Pielke, Jr. was quoted in 28 May 2006 Philadelphia Inquirer article "Experts: Severe weather ahead."
- Roger Pielke, Jr. and Dan Sarewitz were cited in 27 May 2006 Myrtle Beach Online article on 2006 hurricane season.
- Roger Pielke, Jr. was featured on the 21 May 2006 Fox News Documentary on the global warming/climate change debate.
- Roger Pielke, Jr. was quoted in the 8 May 2006 Seed Magazine story on role of physicists in non-scientific political issues.
- Roger Pielke, Jr. was quoted in the 4 May 2006 Guardian article on IPCC's fourth assessment draft report.
- Roger Pielke, Jr. was quoted in the 4 May 2006 Times article on IPCC's fourth assessment report.
- Roger Pielke Jr. was quoted in the 3 May 2006 Nature article on the online posting of IPCC's 4th assessment draft report.
- Presentation by Roger Pielke, Jr. at Colorado College was discussed in the 20 April 2006 Colorado Springs Independent.
- Prometheus weblog was referenced in the 20 April 2006 National Geographic News article on blogs as a tool for science.
- Prometheus weblog was characterized as an "excellent, informative site" in the 14 April 2006 Policy Forum in Science.
- Center's Presidential Science Advisor Series was covered in the 12 April 2006 CU Campus Press News article.
- Center affiliate Dan Sarewitz was quoted in 10 April 2006 San Diego Union Tribune article on climate change.
- Roger Pielke, Jr. was quoted in the 9 April 2006 Daily Camera article on role of academic earmarks on climate research.
- Prometheus weblog was cited as source for a "super El Nino" prediction story in the 8 April 2006 Albuquerque Journal article.
- Roger Pielke, Jr. was profiled in the 30 March 2006 Nature Journal along with his father on the climate change debate.
- Roger Pielke, Jr. was quoted in the 24 March 2006 Daily Camera article on a study about sea levels rising.
- Bobbie Klein's talk at Energy Initiative Town Hall Meeting was referenced in a 22 March 2006 Daily Camera article.
- Roger Pielke, Jr. was quoted in the 16 March 2006 National Geographic News on trends of stronger hurricanes.
- Roger Pielke, Jr. was interviewed 16 March 2006 by Greenwire's OnPoint about the rising costs of natural disasters.
- Center affiliate Dan Sarewitz was quoted in 1 March 2006 USA Today article on science research and policy debate.
- Center graduate student Joel Gratz's research on lightning and college football stadiums was cited in UCAR Quarterly.
- Roger Pielke, Jr. was quoted in a 21 February 2006 Marketplace radio broadcast on the politics of science budgets.
- Roger Pielke, Jr. was quoted in an 8 February 2006 Denver Post article on hurricane research and the climate change debate.
- Roger Pielke Jr. was quoted in an 8 February 2006 Rocky Mountain News article on development of a national agenda on hurricane research.
- Roger Pielke, Jr. was quoted in a 5 February 2006 Daily Camera article on the political misrepresentation of scientific research.
- Center's Presidential Science Advisor Series was covered in a 1 February 2006 CU Campus Press article.
- Myanna Lahsen was quoted a 1 February 2006 Wall Street Journal opinion column about the role of science in the climate debate.
- Roger Pielke, Jr. was quoted in a 31 January 2006 New York Times article on NASA's "Silencing" of Climate Scientist.

- Faculty affiliate Tom Yulsman was interviewed on KCPW Radio 30 January 2006 about his Prometheus post on intelligent design.
- Center's Presidential Science Advisor series was featured in a 24 January 2006 CU Campus Press article.
- Roger Pielke Jr. was cited in a 26 January 2006 China Daily article on space policy.
- Roger Pielke Jr. was cited in a 25 January 2006 AFP article on space policy and the Challenger shuttle.
- Roger Pielke, Jr.'s work on the costs of the space shuttle program was quoted in a 25 2006 January AFP wire story.
- Roger Pielke, Jr. was quoted in a 9 January 2006 Boston Globe article on costs of the space shuttle program.
- Roger Pielke, Jr. was quoted in the January 2006 Discover magazine article "Year in Science."
- Joel Gratz and Roger Pielke, Jr. were cited in the 11 December 2005 New York Times article on costs of hurricanes.
- Roger Pielke, Jr. was cited in a December 2005 Spectrum article on hurricane forecasting.
- Roger Pielke, Jr. was quoted in a 29 November 2005 Dallas News article on forecasting more record-setting hurricanes.
- Roger Pielke, Jr. was quoted in a 26 November 2005 Washington Post article on the 2005 hurricane season.
- Faculty affiliate Tom Yulsman's editorial Science and Religion Face Off appeared in the 20 November 2005 Denver Post.
- Center affiliate Dan Sarewitz was the subject of an 18 November 2005 Chronicle of Higher Education article.
- Roger Pielke, Jr. was quoted in a 28 October 2005 National Journal article on government handling of natural disasters.
- Roger Pielke, Jr. was quoted in a 26 October 2005 Christian Science Monitor article on disaster aid and politics.
- Roger Pielke, Jr. was quoted in an 11 October 2005 Washington Observer article on US-China space policies.
- Roger Pielke, Jr. was quoted in an 11 October 2005 Miami Herald article on hurricane warnings.
- Roger Pielke, Jr. was cited in a 4 October 2005 Travel Weekly article on global warming issues.
- Roger Pielke, Jr. was cited in a 27 September 2005 USA Today article on NASA's Space Shuttle program.
- Roger Pielke, Jr. was quoted in a 25 September 2005 USA Today article on frequency of hurricanes.
- Roger Pielke, Jr. was quoted in a 17 September 2005 Science News article on hurricanes and global warming.
- Roger Pielke, Jr. was quoted in a 17 September 2005 AP article on hurricanes and global warming.
- Roger Pielke, Jr. was interviewed 16 September 2005 by NPR regarding hurricanes and global warming.
- Roger Pielke, Jr. was cited in a 16 September 2005 Denver Post article on hurricanes and global warming.
- Roger Pielke, Jr. was cited in a 16 September 2005 Science Magazine article on Hurricane Katrina.
- Roger Pielke, Jr.'s paper on flood-related disasters was referenced in a 15 September 2005 New York Times article.
- Roger Pielke, Jr. was cited in a 15 September 2005 USA Today article on hurricanes and global warming.
- Roger Pielke, Jr. was cited in a 13 September 2005 St. Petersburg Times article on hurricane cycles.
- Roger Pielke, Jr.'s report on Hurricane Camille was referenced in the 11 September 2005 Nashua Telegraph.
- Roger Pielke, Jr.'s paper on hurricanes and global warming was referenced in the 11 September 2005 New York Times.
- Roger Pielke, Jr. was cited in AP, the Wall Street Journal, Fox News, the Rocky Mountain News, the Times, Fortune, the Arkansas Democrat Gazette, Der Spiegel, Washington Times, Nature, Chronicle of Higher Education, The Trumpet, Wisconsin Technology Network, the Capitol Times, Daily Camera, Colorado Daily, LA Times, National Review, Forbes, On Point, and Sun Herald on Hurricane Katrina.
- Roger Pielke, Jr. was interviewed 31 August 2005 about Hurricane Katrina by Minnesota Public Radio.
- Roger Pielke, Jr. was quoted in a 15 August 2005 AFP wire story on space shuttle program.
- Roger Pielke, Jr. was quoted in a 10 August 2005 New York Times article on the space shuttle program.
- Roger Pielke, Jr. was quoted in a 1 August 2005 Christian Science Monitor article on hurricanes and global warming.
- Roger Pielke, Jr. was quoted in a 1 August 2005 Boston Globe article on hurricanes and global warming.
- Center faculty affiliate Tom Yulsman was interviewed on Utah Public Radio's Midday Utah program.
- Roger Pielke, Jr. was quoted in a 15 July 2005 Chronicle of Higher Education article on the politics of the "hockey stick" issue in climate.
- Center faculty affiliate Tom Yulsman wrote an op-ed on global warming science and policy in the 10 July 2005 Denver Post.

Website: http://sciencepolicy.colorado.edu/outreach/news.html

People

STAFF

Rad Byerly is a Research Scientist who has worked at the Center since its inception in 2001. Rad received his Ph.D. in experimental atomic and molecular physics at Rice University in 1967. He is the former chief of staff for the U.S. House of Representatives Committee on Science and Technology. Since retiring he now works with students to offer his perspective as a practitioner and with faculty on various projects.

Martyn Clark joined the Center in January 2002 as a Research Scientist. Martyn received a Ph.D. from the University of Colorado in 1998, and has worked since then as a research scientist at the Cooperative Institute for Research in Environmental Sciences. Martyn left the Center in May to take a position with NIWA in his native New Zealand.

Lisa Dilling is a CIRES Visiting Fellow with the Center. Lisa received her Ph.D. in biology from the University of California-Santa Barbara. Prior to her working at the Center, Lisa spent two years as a scientist with the Environmental and Societal Impacts group of the National Center for Atmospheric Research.

Bobbie Klein is the Center's Managing Director. She has a B.A. in political science from the University of Illinois, a J.D. from the University of Wisconsin, and an M.A. in Public Policy from the University of Colorado. Prior to joining the Center she worked at the National Center for Atmospheric Research.

Myanna Lahsen joined the Center in June 2003 after serving as a Postdoctoral Fellow, Belfer Center for Science and International Affairs, JFK School of Government, Harvard University. She is an anthropologist studying understandings of carbon cycle science who recently completed an NSF project in Brazil. She is also a CSP Project Scientist, Swedish Institute for Climate Science and Policy Research, (2004-present, projected until 2010), and was recently accepted as Assistant Professor at IUPERJ, a university in Rio de Janeiro, Brazil.

Mark Lohaus is the Center's Webmaster. Mark has a double degree in Chemistry and Internet Database Applications from Metropolitan State College of Denver.

Ami Nacu-Schmidt is the Center's Outreach Coordinator. Ami received a B.A. in Psychology and a certificate in web graphics and design from the University of Colorado.

Linda Pendergrass joined the Center this past year as our Office Manager. Linda has a B.A. in Interdisciplinary Sciences with an emphasis on Environmental Biology and Chemistry.

Roger Pielke Jr. has served as the Center's Director since its inception. Roger joined the faculty of the University of Colorado in July 2001 where he is a Professor in the Environmental Studies Program and a Fellow of the Cooperative Institute for Research in the Environmental Sciences. From 1993-2001 Roger was a Scientist at the Environmental and Societal Impacts Group at National Center for Atmospheric Research. Roger holds a B.A. in mathematics and a Ph.D. in political science, both from the University of Colorado.

Kevin Vranes is a CIRES Visiting Fellow. See the Highlights section at p. 3-4 for a complete description of Kevin's background.

AFFILIATES

Affiliates are significant, long-term collaborators or colleagues, on the faculty either at the University of Colorado or other higher education institutions, who share an interest in science and technology policy.

- **Krister Andersson**, Assistant Professor, Environmental Studies
- **Susan Avery**, Interim Provost, University of Colorado
- **Tom Chase**, Assistant Professor of Geography, University of Colorado
- **Robert Frodeman**, Dept. of Philosophy and Religion Studies, University of North Texas
- **Rudy Juliano**, School of Medicine, University of North Carolina
- **Doug Kenney**, Research Associate, Natural Resources Law Center, University of Colorado
- **Lisa Keranen**, Assistant Professor, Department of Communication, University of Colorado
- **Paul Komor**, Lecturer in the Department of Civil Engineering, University of Colorado, and a Project Director at E SOURCE
- **Sarah Krakoff**, Assistant Professor, Law, University of Colorado
- **Frank Laird**, Associate Professor, Graduate School of International Studies, University of Denver
- **Juan Lucena**, Associate Professor, Liberal Arts and International Studies Division (LAIS), Colorado School of Mines
- **Roop Mahajan**, Professor, Mechanical Engineering, University of Colorado
- **Diane McNight**, Fellow, INSTAAR; Professor of Civil, Environmental and Architectural Engineering, University of Colorado
- **Jana Milford**, Associate Professor, Mechanical Engineering and the Center for Combustion and Environmental Research, and director of the Environmental Engineering Program, University of Colorado
- **Carl Mitcham**, Professor of Liberal Arts and International Studies, Colorado School of Mines
- **Gunilla Oberg**, Linköping University (LiU) and Director, Swedish Institute for Climate Science and Policy Research
- **Jerry Peterson**, Professor, Department of Physics, University of Colorado
- **R. Balaji Rajagopalan**, Assistant Professor and Fellow, CIRES, Department of Civil, Environmental and Architectural Engineering, University of Colorado
- **Joe Ryan**, Associate Professor, Department of Civil, Environmental, and Architectural Engineering, Director of Environmental Engineering Program, and Environmental Studies Program, University of Colorado
- **Dan Sarewitz**, Director, Consortium for Science, Policy and Outcomes, Arizona State University
- **Doug Sicker**, Assistant Professor, Department of Interdisciplinary Telecommunications, University of Colorado
- **Mark Squillace**, Professor of Law and Director, Natural Resources Law Center
- **Kathleen Tierney**, Director, Natural Hazards Center and Professor of Sociology, University of Colorado
- **Phil Weiser**, Associate Professor, Interdisciplinary Telecommunications Program and the School of Law, University of Colorado
- **Alex Wolf**, Associate Professor, Department of Computer Science, University of Colorado
- **Qian Ye**, National Center for Atmospheric Research
- **Tom Yulsman**, Associate Professor, School of Journalism & Mass Communication, co-director of the Center for Environmental Journalism, Environmental Studies Program, University of Colorado

Research Affiliates

Research affiliates are collaborators at CU and elsewhere who are not faculty members.

- **Richard Conant**, ecosystem ecologist, Natural Resource Ecology Laboratory, Colorado State University
- **Douglas Kenney**, Research Associate, University of Colorado Natural Resources Law Center
- **Brad Udall**, Director, Western Water Assessment

Visitors and Collaborators

The Center collaborates with other scientists and professionals from around the world. The following individuals collaborated with Center staff on proposals or projects, co-authored papers with Center staff, or visited the Center in 2005-2006:

- Shardul Agrawala, OECD Environmental Directorate
- Laurens Bouwer, Institute for Environmental Studies, Faculty of Earth and Life Sciences, Vrije Universiteit
- Ian Burton, University of Toronto
- Carol Byerly, historian
- Stanley Changnon, University of Illinois
- Richard Conant, Colorado State University Natural Resource Ecology Laboratory
- Edward David Jr., science advisor to President Richard Nixon
- William Easterling, Pennsylvania State University
- Chris Goemans, University of Colorado economics graduate student
- Lori Hidinger, Program Manager, Consortium for Science, Policy & Outcomes
- Elizabeth Hoffman, former president of the University of Colorado
- Bill Hooke, Senior Policy Fellow and the Director of the AMS Policy Program
- Donald Hornig, science advisor to President Lyndon Johnson
- Tracy Johns, graduate student, Arizona State University
- Diana Josephson, NCAR
- Rudy Juliano, School of Medicine, University of North Carolina
- Douglas Kenney, researcher, CU Natural Resources Law Center
- George Keyworth, science advisor to President Ronald Reagan
- Richard Klein, Potsdam Institute for Climate Impact Research
- Kenneth Kunkel, Center for Atmospheric Science, Illinois State Water Survey
- Peggy Lamm, congressional candidate
- Chris Landsea, NOAA AOML/Hurricane Research Division
- Neal Lane, science advisor to President Bill Clinton
- Jim Laver, Climate Prediction Center, NOAA/ National Weather Service, National Centers for Environmental Prediction
- Jessica Lowrey, researcher, Western Water Assessment
- Roop Mahajan, Department of Mechanical Engineering, University of Colorado
- Max Mayfield, Tropical Prediction Center
- Dennis Mileti, University of Colorado
- Carl Mitcham, Colorado School of Mines
- Susie Moser, NCAR
- Gunilla Oberg, professor, Linköping University (LiU) and Director, Swedish Institute for Climate Science and Policy Research
- Richard Pasch, Tropical Prediction Center
- Frank Press, science advisor to President Jimmy Carter
- Steve Quane, AGI/AAAS William L. Fisher Congressional Science and Technology Policy Fellow
- Dan Sarewitz, director, Consortium for Science, Policy and Outcomes
- Martijntje Smits, Eindhoven Technical University
- Nico Stehr, Zeppelin University
- Emma Thompkins, Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia
- Brad Udall, director, Western Water Assessment
- Hans von Storch, Director of Institute of Coastal Research of the GKSS Research Centre in Geesthacht and Professor at the Meteorological Institute of the University of Hamburg, Germany

BOARDS AND COMMITTEE MEMBERSHIP

Rad Byerly

- NRC Space Studies Board. The board conducts policy studies for the nation's space program. Rad serves on its Executive Committee.

Roger Pielke, Jr.

Editorial Board Membership

- 2006- Member, Editorial Board, Water Resources Research
- 2004- Member, Editorial Board, Environmental Science and Policy
- 2004- Member, Editorial Board, Darwin
- 2003-2005 Member, Editorial Board, International Encyclopedia of Science, Technology and Ethics
- 2001- Member, Editorial Board, Bulletin of the America Meteorological Society
- 2001- Member, Editorial Board, Policy Sciences
- 2001- Member, Editorial Board, Natural Hazards Review

National and International Committee Service

- 2005- Member, Advisory Committee, Societal Impacts Group, National Center for Atmospheric Research
- 2003-2005 Advisory Panel, Program on Societal Dimensions of Engineering, Science and Technology, National Science Foundation
- 2003- Member, Advisory Committee, Pacific ENSO Applications Center
- 2001-2006 Member, Board of Directors, WeatherData, Inc.

Staff Highlights

Lisa Dilling

Lisa Dilling et al. gave an invited presentation on "Science for Carbon Management: Making effective connections between users and producers of information" to the Energy Systems Management session of the Climate Change Science Program Workshop: Climate Science in Support of Decision Making. The workshop was one of the largest held by the Climate Change Science Program to date and took place in Arlington, VA on 14-16 November, 2005.

Myanna Lahsen

This was the final year of Myanna's National Science Foundation award for "Our Science, Their Science" (see p. 6) which has kept her working in Brazil since 2003. Myanna has also been busy with activities as Project Scientist with the Swedish Institute for Climate Science and Policy Research. She collaborated with Dr. Carlos Nobre, the current president of the International Geosphere-Biosphere Programme (IGBP) around various writing projects. She accepted a job to work with him for two years in the capacity of Science Officer for Social Sciences for the Brazilian Regional Office of the International Geosphere-Biosphere Programme (IGBP). Myanna found herself in good company when, along with Bill Clinton, Al Gore, Tony Blair, she was mentioned by the Wall Street Journal in an article about global warming (see Business World: A Global Warming Worksheet, by Holman W. Jenkins, Jr., http://proquest.umi.com/pqdweb?did=979369231&Fmt=3&clientId=56281&RQT=309&VName=PQD&cfc=1).

Bobbie Klein, Ami Nacu-Schmidt and Linda Pendergrass

Bobbie Klein, Ami Nacu-Schmidt, and Linda Pendergrass were awarded the CIRES Outstanding Service Award for their efforts in organizing the presidential science advisor lecture series.

Roger Pielke, Jr.

In 2006 Roger Pielke, Jr. completed a new book, titled The Honest Broker: Making Sense of Science in Policy and Politics, which will be published early in 2007 by Cambridge University Press. In the book Roger argues that scientists have choices in how they decide to engage with policy and politics. The book provides some guidance as to how such choices might be made, and their consequences for individual scientists and the broader community.

Kevin Vranes

Kevin joined the Center in January and immediately began working up a paper on earthquake damage loss and issues in comparative natural hazards, now submitted to Natural Hazards Review. He is also pursuing water resources management research on New York City and Western Colorado watersheds and continues to blog about science policy issues on Prometheus and NoSeNada (http://scienceblogs.com/nosenada/).

Center for Science and Technology Policy Research
Strategic Plan
Revised January 2006

Vision

The Center serves as a resource for science and technology decision makers and those providing the education of future decision makers.

Mission Statement

The Center works to improve how science and technology policies address societal needs, including research, education and service.

Achieving this mission requires making progress toward the following four interrelated strategic intents:

Strategic Intent #1

Help guide the University of Colorado in educating the next generation of science and technology policy decision makers.

Objectives

- **Build** a sustainable graduate science and technology policy education program at the University of Colorado.
- **Serve** as a national role model in innovative science and technology policy education.
- **Integrate** faculty skills and expertise across disciplines and fields contributing to their professional development, research, and educational goals.
- **Enable** the University of Colorado to serve as a leading voice in national and international science and technology policy issues.

Strategic Intent #2

Help make the nation's science portfolios more responsive to societal needs. Example areas include climate and global change, disasters, nanotechnology, biotechnology, and renewable/sustainable energy.

Objectives

- **Identify** criteria for reconciling supply of and demand for scientific information in decision making.
- **Identify and present** criteria for developing and evaluating broad portfolios of scientific and technological research.
- **Identify and develop** relationships with our target audiences to learn about their information needs and how we can best assist them.
- **Develop** an outreach strategy to disseminate the Center's products to our target audience.

Strategic Intent #3

Provide various means for people with differing perspectives to discuss research and practice related to science in its broader societal context.

Objectives

- **Identify** the current and potential users of our discussion fora.
- **Evaluate** current activities and continuously develop new activities to serve effectively our users' needs.
- **Experiment** with new technologies, educational tools, mechanisms of outreach, and forms of stakeholder interaction to enhance the opportunities for discussion and debate on important topics related to science and society.

Strategic Intent #4

Build a sustainable, diverse and productive institution at the University of Colorado-Boulder.

Objectives

- **Achieve** sufficient and stable funding to support the Center's core activities.
- **Achieve** a critical mass of personnel able to carry out the Center's mission.
- **Have** all Center staff co-located on the main campus.
- **Further improve and refine** the Center's governance structure to support growth and guide its future direction.
- **Develop** the Center's "brand."

Grant Activity

Current/Pending Proposals, 2005-2006

Project/Proposal Title	Source	Amount	Start Date	End Date
Science Policy Assessment and Research on Climate – Decision Making Under Uncertainty	NSF	$2.4 million	01/05	12/09
Understanding and Enhancing the Linkages Between Decision-Making and Carbon Cycle Research	NOAA OGP	$118,120	10/02	08/05
CU Engineering Test Beds for Real-Time Technology Assessment (RTTA)	Subcontract with Arizona State University	$84,000	08/05	07/10
Our Science and Their Science - Conflicting Agendas and Disputed Theories Concerning Amazonia	NSF	$179,936	03/03	03/06
Understanding the Spatio-Temporal variability of the North American Monsoon: Implications to Water Resources Management in the South Western U.S.	NOAA	$213,427	01/03	01/06
Collaborative Research: A land surface model hind-cast for the terrestrial Arctic drainage system	NSF	$125k/yr	2003	05/06
Improving Operational Streamflow Forecasts in the Colorado River Basin	NWS	$280,000	06/04	05/06
Scales of Decision Making and the Carbon Cycle	NOAA	$266,088	05/04	04/07
Lessons in Technology Transfer Policy for the Atmospheric Sciences: A case study in Public-Private-Academic Partnership on Level II Radar Data	NWS	$30,000	01/05	12/05
The State of the Carbon Cycle: North America	NASA, NOAA, DOE, NSF	$272,843	09/04	12/05

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