

LISA DILLING, Ph.D.

Center for Science and Technology Policy Research
Cooperative Institute for Research in Environmental Sciences
University of Colorado
1333 Grandview Ave., 488 UCB
Boulder, CO 80309-0488
ldilling@colorado.edu
(303) 735-3678

EDUCATION

1997 Ph.D., University of California, Santa Barbara, CA Biological Sciences
1989 B.A., Harvard University, Cambridge, MA Biology, *magna cum laude*

EXPERIENCE

2007-present Assistant Professor, Environmental Studies, University of Colorado, Boulder, CO

2004-2007 Visiting Fellow, Center for Science and Technology Policy Research, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder CO

2002-2007 Visiting Scientist to Project Scientist II, Environmental and Societal Impacts Group, National Center for Atmospheric Research, Boulder CO

1998-2002 Program Manager, Carbon Cycle Program, Office of Global Programs, National Oceanic and Atmospheric Administration, Silver Spring, MD. Selected accomplishments:

- Led formation and implementation of national Carbon Cycle Science Interagency Program as Co-Chair and NOAA representative. Among other activities, established new carbon cycle US Global Change Research Program focus, co-wrote interagency implementation plan and carbon cycle component of USGCRP Strategic Plan, established Carbon Cycle Scientific Steering Group, and steered interaction of 6-agency working group to accomplish collective actions. Shepherded national and NOAA-level scientific community planning processes, which resulted in the publication of the Carbon Cycle Science Plan, the North American Carbon Plan, the Large-Scale Carbon-dioxide Observing Plan, and a data management plan for ocean carbon data.
- Expanded NOAA Global Carbon Cycle budget from \$2.3M to \$6.4M. Managed program budget and one associate program manager, developed and implemented program plans, issued announcements of opportunity, managed competitive review process and represented program to NOAA leadership and the academic community.

1997-1998 Associate Program Manager for Ocean-Atmosphere Carbon Exchange Study and Atlantic Climate Change Program, Office of Global Programs, National Oceanic and Atmospheric Administration (through UCAR), Silver Spring, MD.

1996-1997 National Sea Grant Fellow, International Development, Office of Global Programs, National Oceanic and Atmospheric Administration, Silver Spring, MD

GRANTS AND AWARDS

PI and Co-Lead, State of the Carbon Cycle Report. NASA Cooperative agreement \$272,843/First year

PI, Scales of Decision-Making and the Carbon Cycle. NOAA Grant \$272,510 for 3 years.
Co-PI and Exec. Director, Science Policy Assessment and Research on Climate for Decision-Making Under Uncertainty. NSF Grant \$2,409,507 (all institutions) for 5 years.
CIRES Visiting Fellowship 2004-present
NOAA Cash Award, 1998, 1999, 2000, 2001
Dean John A. Knauss Marine Policy Fellowship, 1995
National Science Foundation Graduate Fellowship, 1991-1993

JOURNAL ARTICLES

Lemos, M.C. and Dilling, L. 2007. Equity in forecasting climate: Can science save the poor? *Science and Public Policy*, 34(2): 109-116.

Dilling, L. 2007. Towards science in support of decision making: Characterizing the supply of carbon cycle science. *Environmental Science and Policy* 10:48-61.

Dilling, L. 2007. Commentary: The opportunities and responsibility for carbon cycle science in the U.S. *Environmental Science and Policy* 10:1-4.

Dilling, L. 2007. Toward carbon governance: Challenges across scales in the United States. *Global Environmental Politics*, 7(2): 28-44.

Moser S and Dilling L. 2004. Making Climate Hot: Communicating the urgency and challenge of global climate change. *Environment* 46: 32-46.

Dilling L, and MA Brzezinski. 2004. Quantifying marine snow as a food choice for zooplankton using stable silicon isotope tracers. *Journal of Plankton Research* 26:1105-1114.

Dilling L, Doney S, Edmonds J, Gurney KR, Harriss R, Schimel D, Stephens B, and Stokes G. 2003. The role of carbon cycle observations and knowledge in carbon management. *Annual Review of Environment and Resources* 28:521-58.

Dilling L, and AL Alldredge. 2000. Fragmentation of marine snow by swimming macrozooplankton: A new process impacting carbon cycling in the sea. *Deep Sea Res. I* 47:1227-1245.

Dilling L, J Wilson, D Steinberg, and AL Alldredge. 1998. Feeding by the euphausiid *Euphausia pacifica* and the copepod *Calanus pacificus* on marine snow. *Mar. Ecol. Prog. Ser.* 170: 189-201.

Dilling L. and AL Alldredge. 1993. Can chaetognath fecal pellets contribute to carbon flux? *Mar. Ecol. Prog. Ser.* 92:51-58.

BOOK

Moser, S. and Dilling, L., Eds. 2007. *Creating a Climate for Change: Communicating Climate Change—Facilitating Social Change*. Cambridge University Press, Cambridge UK.

BOOK CHAPTERS

Dilling, L. and Farhar, B. 2007. 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. Cambridge University Press.

Dilling, L. and Moser, S. 2007. Introduction. In: Moser S and Dilling L., Eds. Creating a Climate for Change: Communicating Climate Change—Facilitating Social Change. Cambridge University Press.

Moser, S. and Dilling, L. 2007. Toward the Social Tipping Point: Creating a Climate for Change. In: Moser S and Dilling L., Eds. Creating a Climate for Change: Communicating Climate Change—Facilitating Social Change. Cambridge University Press.

BOOK REVIEWS

Dilling, L. 2006. Book review of: Assessments of Regional and Global Environmental Risks: Designing Processes for the Effective Use of Science in Decisionmaking, Edited by Alexander Farrell and Jill Jäger, Environment October 2006, p.40.

Dilling, L. 2003. Book review of: Climate Change Policy: A Survey Edited by Stephen H. Schneider, Armin Rosencranz, and John O. Niles. Environment 45 (10):37-38.

PEER-REVIEWED REPORTS

Dilling, L., R. Mitchell, D.M. Fairman, M. Lahsen, S. Moser, A. Patt, C. Potter, C. Rice, and S. VanDeveer, 2007: How Can We Improve the Usefulness of Carbon Science for Decision Making? In: The First State of the Carbon Cycle Report (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research [King, A.W., L. Dilling, G.P. Zimmerman, D.M. Fairman, R.A. Houghton, G. Marland, A.Z. Rose, and T.J. Wilbanks (eds.)]. National Oceanic and Atmospheric Administration, National Climatic Data Center, Asheville, NC, USA, pp. 49-56.

CCSP. The First State of the Carbon Cycle Report (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research [King, A., Dilling, L., Fairman, D., Houghton, R., Marland, G., Rose, A., Wilbanks, T. (eds.)]. National Oceanic and Atmospheric Administration, Climate Program Office, Silver Spring, MD, USA, National Climatic Data Center, Asheville, NC, USA, 242 pp.

Denning, A.S. et al. 2005. Science Implementation Strategy for the North American Carbon Program. Report of the NACP Implementation Strategy Group of the U.S. Carbon Cycle Interagency Working Group. Washington, DC: U.S. Carbon Cycle Science Program, 68pp. Available online: <http://www.nacarbon.org/nacp/documents.html>

TEACHING EXPERIENCE

1992, 1993 Introductory Biology, University of California, Santa Barbara. Laboratory Teaching Assistant.

Guest lecturer: University of Maryland (for Chris Justice), Old Dominion University (for Margie Mulholland and Skip Stiles), University of Miami (for Kenny Broad), University of Colorado (for Jerry Peterson)
Invited mentor for DISCCRS (DISsertation Initiative for the advancement of Climate Change ReSearch), Ron Mitchell and Sue Weiler, P.I.s

WORKSHOPS/SESSIONS CO-ORGANIZED (Since 2003)

2006 AGU Fall Meeting: “Creating usable science in the 21st Century: Strategies for more effectively connecting science to societal needs”
2004-2006 Stakeholder Workshops (for State of the Carbon Cycle Report process)
2005 SPARC workshop: Decision Support and Carbon Cycle Science: Practical Strategies to Reconciling the Supply of and Demand for Carbon Cycle Science
2004 Communicating Urgency – Facilitating Social Change: New Strategies for Climate Change (hosted by NCAR)
2003 AGU Fall Meeting: “Human Interactions and the Carbon Cycle in North America”

PROFESSIONAL SERVICE/ACTIVITY HIGHLIGHTS

2004-present Co-Lead, State of the Carbon Cycle Report (SOCCR)/SAP 2.2, Climate Change Science Program
2005-2006 DISsertation Initiative for the advancement of Climate Change ReSearch (DISCCRS) Mentor
2004 SOARS (Significant Opportunities in Atmospheric Research and Science) Mentor
2003-2006 Carbon, Climate and Society Initiative, Integrated Graduate Research and Traineeship Program (IGERT), University of Colorado, Boulder
2003-2005 North American Carbon Plan (NACP) Implementation Strategy Group
2003-2004 Project Manager, Assessment Initiative, National Center for Atmospheric Research
1999-2002 Co-Chair, Carbon Cycle Interagency Working Group, U.S. Global Change Research Program

SELECTED PRESENTATIONS (out of over 30 since 2003)

Dilling, L. “Usable” carbon science: Supporting carbon governance and decision making across scales.” Invited presentation, Institute for the Study of Society and Environment, National Center for Atmospheric Research. March 9, 2007.

Dilling, L. “Communicating about climate change: Moving beyond the myths towards more effective strategies for societal engagement.” Invited presentation, University of Colorado. Feb. 28, 2007.

Dilling, L. “Usable Carbon Science: Creating new science policies to support decision making”. Invited Presentation, CIRES/University of Colorado. Feb. 27, 2007.

King, A. and Dilling, L. “The First State of the Carbon Cycle Report (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle U.S. Climate Change Science Program Synthesis and Assessment Product 2.2.” Invited briefings for Executive Office of the President, White House Office of Science and Technology Policy, and Climate Change Science Program. February 21, 2007.

- Dilling, L. The challenge of communicating about climate change to support societal action. American Association for the Advancement of Science. Annual Meeting, San Francisco, CA February 15-19, 2007.
- Dilling, L. Decision support, NACP and “usable carbon science.” Invited plenary presentation, North American Carbon Program PI Meeting, Colorado Springs, CO, January 24th, 2007.
- Dilling, L. and Lemos, M.C. Defining usable science. American Meteorological Society Annual Meeting, January 14-18, 2007.
- Dilling, L. Supporting the creation of usable science: Progress and challenges. American Geophysical Union Fall Meeting, 11-15 December 2006.
- Dilling, L. Invited panelist, Hennebach Workshop on Public Policy, Colorado School of Mines, Golden CO, November 17, 2006.
- Dilling, L. Linking Science to Society: Considering the notion of ‘usable science’. Invited presentation, University of Miami, FL, November 14, 2006.
- Dilling, L. Terrestrial Carbon Sinks. Invited Presentation, Ecothresholds Meeting, Warrenton, VA. November 7-10, 2006.
- Dilling, L. Invited Panelist for ‘Enhancing Reliability and Usability of Science Information’ Session, GSA conference on Managing Drought and Water Scarcity in Vulnerable Environments: *Creating a Roadmap for Change in the United States*. Longmont, CO, 18-20 September 2006
- Dilling, L., Easterling, W.E. and Vanderbrink, K. Cross-scale carbon governance challenges in the United States. Global Carbon Project Urban and Regional Carbon Management, Mexico City, 4-8 Sept., 2006.
- Dilling, L. The implications of mismatched supply and demand for climate science: The case of U.S. carbon cycle science. Gordon Research Conference on Science and Technology Policy, Big Sky MT, August 14-18, 2006.
- Dilling, L. “Science Policy Research and Assessment on Climate: An overview and current progress.” Invited presentation, Annual Meeting of the Consortium for Research in Environmental Decision Making, Columbia University, 12 May, 2006.
- Dilling, L. “Carbon governance and creating usable knowledge”. Invited presentation, DISCCRS II Symposium, Asilomar Conference Center, Pacific Grove CA. March 27, 2006.
- Dilling, L., Maricle, G., and Pielke, Jr., R. “Applying science policy research: The case of the carbon cycle science program.” American Meteorological Society Annual Meeting, 29 January-2 February, 2006.
- Dilling, L., Pielke Jr., R. and Sarewitz, D. “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, 2006.

- Dilling, L. "Usable" Carbon Cycle Science: Creating science policies that facilitate the use of research in decision-making. Invited presentation, Natural Resources Ecology Laboratory, Colorado State University, January 27, 2006.
- Dilling, L. "Alternatives to the Linear Model: Implications for climate science policies." Consortium for Science, Policy and Outcomes, Arizona State University, January 19, 2006.
- Dilling, L., Pielke Jr, R., and Sarewitz, D. 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 2005.
- Dilling, L., Fairman, D., Pielke, R., and King A. "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, 2005.
- Dilling, L. "Tools for the New Frontier: Practice Steps to Creating Usable Science." CSTPR Seminar Series 28 October 2005.
- Dilling, L. "Usable" Carbon Cycle Science: the need for a new approach." 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, 9-13 October 2005, Bonn, Germany
- Dilling, L. "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, 9-13 October 2005, Bonn, Germany
- Dilling, L. "Usable" Carbon Cycle Science: Exploring the nexus of carbon cycle science and carbon management at different scales." Seventh International Carbon Dioxide Conference. Broomfield, CO, September 25-29th, 2005.
- Dilling L., Pielke Jr, R., and Sarewitz, D. "Science Policy Assessment and Research on Climate". Presentation to the Climate, Science and Policy beyond 2012 (CSP 2012+) Workshop, Soderkoping, Sweden. Sept 19-20, 2005.
- Dilling, L. Invited Presentation: "Usable Carbon Cycle Science: Exploring the nexus of carbon cycle science and management at different scales." International Postdoctoral Scientist Network for Earth Systems Science. Breckenridge, CO, June 23-25, 2005.
- Dilling, L. Introduction, challenge, and charge to the workshop, "Decision Support and Carbon Cycle Science." University of Colorado, June 13-14, 2005.
- Dilling L. "Toward carbon governance: Challenges for science and policy across scales." Association of American Geographers. 2005 Annual Meeting.
- Dilling, L. and Moser, S. "Making Climate Hot: Communicating the urgency and challenge of global climate change." American Geophysical Union 2004 Fall Meeting.

Dilling L., Pielke Jr, R., and Sarewitz, D. “Pilot study on reconciling supply and demand: Who are the consumers of information on the North American carbon balance?” American Geophysical Union 2004 Fall Meeting.

Dilling L, Doney S, Edmonds J, Gurney K, Harriss R, Schimel D, Stephens B, Stokes G. “A review of the role of carbon cycle science in supporting carbon management policy” American Geophysical Union 2003 Fall Meeting.

Pielke, Jr., Sarewitz D, Dilling L, and Conant R. “Carbon Cycle Science: Reconciling Supply and Demand” North American Carbon Program 2003 PI meeting

THESIS COMMITTEES

Nat Logar, Master’s Thesis, University of Colorado (Chair) and Dissertation committee
Tracy Johns, Master’s Thesis, University of Arizona

PEER REVIEW SERVICE

Agency: National Science Foundation
Agency: National Aeronautics and Space Administration
Agency: National Oceanic and Atmospheric Administration
Agency: EUR-OCEANS (6th Framework of European Communities)
Journal: Tellus
Journal: Environmental Science and Policy
Journal: Agricultural Systems Journal
Journal: Journal of Plankton Research
Journal: Environmental Research Letters
Journal: Bulletin of the American Meteorological Society
Journal: Climate Policy
AGU Book Series
MIT Press
Cambridge University Press
National Academy of Sciences

PROFESSIONAL MEMBERSHIPS

American Geophysical Union
American Meteorological Society

COMMUNITY SERVICE

Appointed member of the Boulder County Parks and Open Space Advisory Committee