

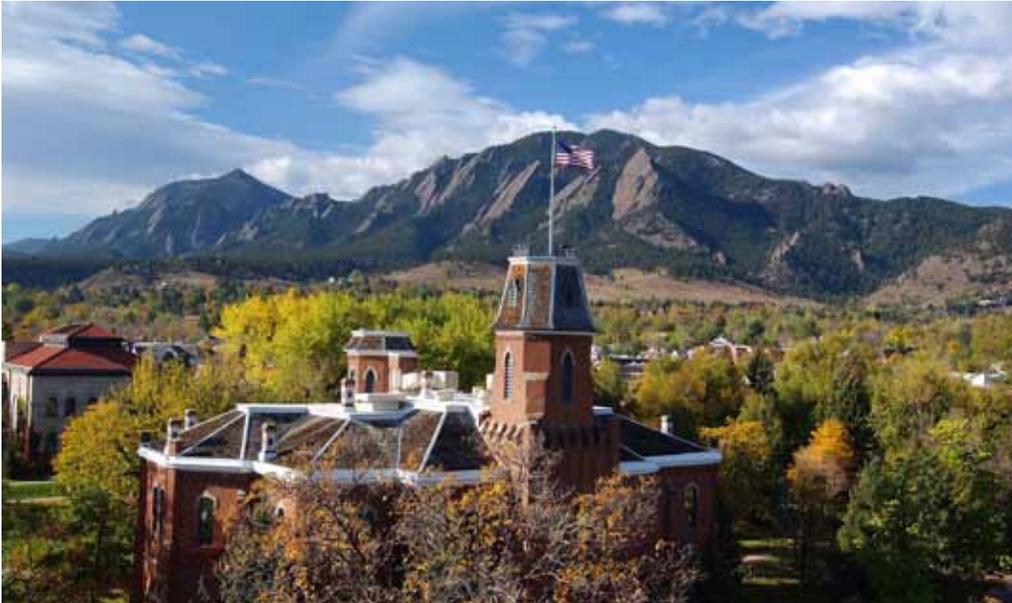
Ogmius

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OGMIUS EXCHANGE

This edition of Ogmius features an article by the latest faculty member to join CSTPR, Deserai Anderson Crow. Deserai describes an international conference that she organized at CU-Boulder this fall. Deserai is an Assistant Professor in the Environmental Studies program at the University of Colorado Boulder. She is Associate Director of the Center for Environmental Journalism and became affiliated with the Center for Science & Technology Policy Research this past summer. She joined the faculty of the School of Journalism and Mass Communication in 2008 and moved to the Environmental Studies Program in 2012. She earned her Ph.D. from Duke University's Nicholas School of the Environment and Earth Sciences and a Masters of Public Administration from the University of Colorado at Denver's School of Public Affairs.



Her research interests include environmental policy and the role that mass media and other factors play in policy decisions. She is particularly interested in environmental issues in the western United States. Her current research includes studies on environmental reporting trends, communication in environmental policymaking, and stakeholder use of environmental messaging strategies. Her previous research focuses on the adoption of non-consumptive recreational water rights by Colorado communities and the factors that influenced policy change within these communities, including mass media, policy entrepreneurs, stakeholder group involvement, and citizen engagement.

After earning her B.S. in Journalism from the University of Colorado at Boulder, she worked as a broadcast reporter, anchor, and producer in Nebraska, West Virginia, California, Colorado Springs, and Denver. Read more about Deserai: http://sciencepolicy.colorado.edu/about_us/meet_us/deserai_crow/index.html. Welcome Deserai!

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<http://sciencepolicy.colorado.edu/ogmius>

INTERNATIONAL CONFERENCE ON CULTURE, POLITICS & CLIMATE CHANGE

by Deserai Anderson Crow

This fall almost 350 scholars representing over 20 countries converged on Boulder to explore the obstacles and opportunities confronting policy-makers with regard to climate policy. Deserai Crow organized the International Conference on Culture, Politics & Climate Change this September. The Center for Environmental Journalism sponsored the conference. The Cooperative Institute for Research in Environmental Sciences (CIRES) was also a major sponsor of the conference and CSTPR faculty member Max Boykoff served as an adviser for the conference.



Mike Hulme, Professor at University of East Anglia, gives keynote lecture at International Conference on Culture, Politics & Climate Change

Discussions about climate change, policy, and science arise in a variety of cultural settings. Questions of how and whether to address climate change on a national and global scale are significant parts of political and cultural discourse. How policy is made, the role of state and non-state actors, the communication of science and values, and how meaning is derived from our shared culture are all questions that directly influence policy outcomes. In the context of U.S. national elections and ongoing international climate negotiations, these considerations are especially relevant. The cross-disciplinary conference explored intersections between culture, politics, and science in order to enhance our understanding of public policy addressing climate change.

Spirituality, among others came to Boulder to present their research.

One of the primary lessons from the conference related to the importance of information as a central mechanism through which cultural values are expressed, politics and policy are played out, and solutions are found or blocked. Through the use, production, and consumption of information, the translation of values into political outcomes

The conference emerged from a desire by faculty in several academic units at CU-Boulder to cross disciplinary boundaries and to address climate change in a manner not often done in research – by breaking down traditional barriers to meet colleagues confronting similar problems within different contexts. Some of the foremost scholars in fields such as Environmental Policy and Politics, Risk Communication, Visual Culture, Journalism Studies, Globalization and

Questions of how and whether to address climate change on a national and global scale are significant parts of political and cultural discourse.



presents certain important areas for scholarly exploration from which important recommendations can be made to scientists, policymakers, and media. Professors Deserai Crow and Max Boykoff are working on a volume of papers from the conference focused on the theme of information as a force for shaping future climate policy and cultural values.

This collection of scholarship will present both critical and empirical essays designed to help us understand how we communicate about the climate, the effects of how we frame our discussions of climate, and the consequences for policymaking. Scholars in this volume analyze the approaches of environmental advocacy groups and mass media, and assess the use of information to build policy capacity in organizations. The book concludes with papers that push the body of climate research forward in new directions. By focusing specifically on the role of information – how we produce it, consume it, and make decisions based on it – we believe that the book will contribute to the growing body of scholarship that helps us understand and teach about the climate, specifically as it relates to human behaviors, knowledge, and decisions.

The book, titled “Culture, Politics and Climate Change: How Information Shapes our Common Future” is scheduled

Through the use, production, and consumption of information, the translation of values into political outcomes presents certain important areas for scholarly exploration from which important recommendations can be made to scientists, policymakers, and media.

for publication in late 2013 or early 2014 with Routledge-Earthscan. You can visit the conference website at: <http://www.climateculturepolitics.org> to view archived presentations and conference information.

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RESEARCH HIGHLIGHT

THE NORMATIVE DIMENSIONS OF CLIMATE CHANGE

by Benjamin Hale

Earlier this fall the National Science Foundation (NSF) awarded a \$400,000 joint grant to me and several of my colleagues at Northern Arizona University and the University of Montana.



With this support we aim to develop educational resources for U.S. graduate students to address questions at the intersection of ethics, public policy, and environmental science. There are many interesting pedagogical features of the grant, but most of the CU portion—which totals approximately \$100,000—will go to funding a smaller, self-contained research project directed by me and facilitated by two of my graduate students, Alex Lee and Adam Hermans.

The CU-Boulder team plans to produce approximately twelve 5-10 minute video episodes designed to call attention to important ethical questions underlying the climate debate. These videos will highlight the scientific, policy, and human dimensions of regionally important environmental issues, each with a connection to climate change. Our team will restrict issues under investigation primarily to the four corners area of the Western United States and will draw material from interviews with and publications by faculty at the University of Colorado, Boulder and Northern Arizona University, including local CU-based experts. The videos will be sufficiently short enough to leave time for in-class discussion. Given the regional relevance of the videos, the issues under consideration will be meaningful to the students. By introducing ethical questions through relevant scenarios and concrete cases, including the testimony of stakeholders and visual illustrations of the scientific and philosophical factors in play, students and others will hopefully be drawn into deliberative engagement with instructors and classmates.

Consider, for instance, the complex questions associated with “change,” which we will discuss in our first episode. On one hand, change is simple. It’s the descriptive Δ , a measure of difference over time. In the climate discussion, we’re concerned with how the climate will change. But on the other hand, change has a normative dimension as well. As the universe changes, actors within that universe must change in response. So the question for the actor is what to change in response to this observed or anticipated Δ . Certainly actors can change passively, by way of “being changed,” as they might be battered around like a ship at sea. But they can also change by taking a hand in this change. Maybe the appropriate response is to change their behavior—as

when it begins to rain one changes into galoshes. Or perhaps it is to keep their behavior but to change their objectives—as one might decide to arrive at the party wet. Or perhaps it is yet more complicated than simply changing behavior or objectives. Maybe responding to change will involve changing one’s values—as one might shift to appreciate the state of being wet; or perhaps instead change one’s beliefs about what it is to be wet—as Londoners have a different sense of wetness than Tucsonans. Likewise, we’ll need to change something vital about our lives in order to respond to climate change. In our first episode, we’ll use changes in the ski industry to cover some of the normative dimensions of change in hopes of illustrating clearly how climate change is much more than merely a descriptive observation.

What follows in the remaining eleven episodes will be discussions of other important normative questions coupled with familiar descriptive climate issues. We’ll look at the question of resource extraction to discuss the fungibility and substitutability of value. We’ll touch on the Colorado River compact to explore standard commons questions, particularly with an eye toward clarifying what is so allegedly tragic about the tragedy of the commons. We’ll discuss assisted colonization to make sense of the question of moral reparation. We’ll look at the question of epistemic uncertainty, vagueness, and indeterminacy through the lens of the pine beetle epidemic. We’ll explore obligations to future generations by watching natural and non-natural objects deteriorate over time. We’ll also explore the possibility of counterfactual beneficiaries and the prospect that environmental damages aren’t neatly characterizable as harms to specific persons, which actually poses an enormous challenge to climate activism. The videos will be made available on a public website, along with suggested reading lists and questions, for integration into classes at NAU, Colorado, and elsewhere.

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CENTER NEWS

Max Boykoff Grants

Max Boykoff was awarded an Information, Communication, Journalism, Media and Technology (ICJMT) grant for 2012-2013 as a Co-PI with Beth Osnes, Rebecca Safran, Tom Yulsman and Ryan Vachon. The project, 'Climate Corps,' focuses on providing curriculum development specific to climate communication.



Max is also an Advisor to 'Science Express' PI David Lustick, University of Massachusetts-Lowell (2012-2017) on a grant that aims to assess whether advertising space on subway platforms and trains is an effective means to engage commuters in learning about climate science. For more information, click here: <http://www.uml.edu/News/stories/2011-12/ScienceExpress.aspx>.

Max Boykoff's Work Referenced in Senate Floor Speech

On July 30, VT Senator Bernie Sanders referred to Max Boykoff's research on media coverage of climate change in his speech on the Senate floor. View the speech here: <http://youtu.be/ak9yECImrVc>.



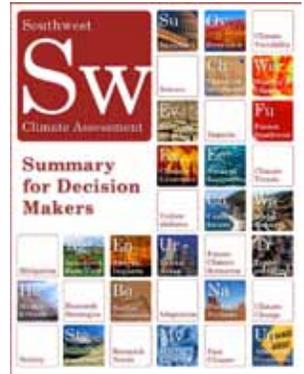
Second Most Emailed New York Times article by Ben Hale

Ben Hale's article, The Veil of Opulence (<http://opinionator.blogs.nytimes.com/2012/08/12/the-veil-of-opulence/?src=me&ref=general>), was the second most emailed New York Times article on August 14.



Boykoff, Dilling, Nacu-Schmidt and Travis Major Contributors to Southwest Climate Assessment of the National Climate Assessment

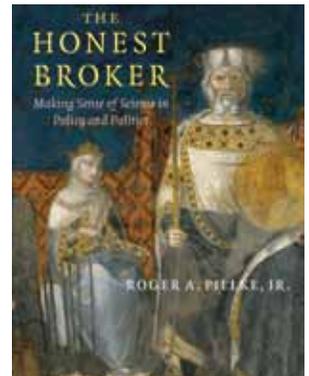
Several members of CSTPR were major contributors to the Southwest Climate Assessment, one component of the ongoing National Climate Assessment. Bill Travis was a co-author of Chapter 1: Summary for Decision Makers, and Chapter 3: The Changing Southwest. Lisa Dilling and Max Boykoff were co-authors of Chapter 18: Climate Choices for a Sustainable Southwest.



Ami Nacu-Schmidt created the majority of the images, which weave into a graphical story across the report. The Summary for Decision Makers is now available here: http://www.southwestclimatealliance.org/sites/default/files/SWCA_Decision_Makers.pdf. The complete report will be available sometime this fall at <http://www.swcarr.arizona.edu> and <http://www.cakex.org>.

New Grant for Roger Pielke, Jr. to Study Role of Philanthropy in Policy and Politics

Roger Pielke, Jr. recently received a \$100k grant from the Nathan Cummings Foundation for a new project on the role of philanthropy in policy and politics. Building on the engagement model first introduced in his book, *The Honest Broker* (http://sciencepolicy.colorado.edu/publications/special/honest_broker), the project's goal is to help philanthropic organizations better understand how they might contribute to improved decision making through support of analyses that help policy makers to make better decisions.



GRADUATE STUDENT NEWS

Kelli Archie Awarded Ph.D. and Published New Paper

Center graduate student Kelli Archie was awarded a Ph.D. in ENVS in December. Kelli's research on climate change adaptation planning on public lands in the Western U.S. and in Colorado mountain communities was supported by the Center's NSF "SPARC" project. She was advised by Lisa Dilling. Congrats Kelli!!



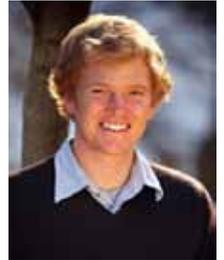
A paper summarizing Kelli's research was recently published. Archie, K. M., L. Dilling, J. B. Milford and F. C. Pampel (2012), Climate Change and Western Public Lands: a Survey of U.S. Federal Land Managers on the Status of Adaptation Efforts, Ecology and Society 17 (4): 20

Abstract: Climate change and its associated consequences pose an increasing risk to public lands in the western United States. High-level mandates currently require federal agencies to begin planning for adaptation, but the extent to which these mandates have resulted in policies being implemented that affect on the ground practices is unclear. To examine the status of adaptation efforts, we conducted an original survey and semi-structured interviews with land managers from the four major federal land management agencies in the U.S. states of Colorado, Utah, and Wyoming. The survey was designed to examine current planning for adaptation on public lands and how it differs from prior planning, the major challenges facing land managers in this region, the major barriers preventing managers from

planning for adaptation, and the major hurdles associated with implementing adaptation plans... Read more: <http://www.ecologyandsociety.org/vol17/iss4/art20/>.

John Berggren White Paper on Climate Information Needs in the Missouri River Basin

Center grad student John Berggren prepared a white paper for the Western Water Assessment, "Analysis of Documented Needs for Climate Information in the Missouri River Basin".



From the Executive Summary: In order to gain a better understanding of climate-related needs in the Missouri River Basin, this project entailed an analysis of needs stated in published documents. Through web-based searches and the querying of colleagues within the Basin, fifty-three documents were ultimately selected to be included in the analysis...While a variety of needs were identified across the multiple sectors and coding categories, some general themes emerged. Some of these commonly seen needs included: the need for additional plains snowpack monitoring, especially from the flood control sector; modeling output needs to be applicable to users and at a scale that is relevant to the intended recipients of decision-makers; a better understanding of potential climate change impacts for their respective sectors is needed, and it seemed that a lack of understanding these potential impacts translated into a barrier for decision-making in regards to adaptation. Read more: http://www.colorado.edu/publications/reports/missouri_basin_final_report.pdf.

CENTER EVENTS

CSTPR 10th Anniversary Celebration

CSTPR celebrated its 10th anniversary on September 27 by welcoming back several of our successful alumni who are scattered around the country, as well as current Center faculty, staff, students, affiliates, University officials and community members. The event featured 4 panel discussions:

- "Extremes: Nature, Society and Policy" organized and moderated by Bill Travis;
- "Public Engagement in Science and Technology: When the Stakes are High and Debates are Lively" organized and moderated by Lisa Dilling and Max Boykoff;
- "Usable Science: The Promise and Peril of Directing Research Toward Practical Outcomes" organized by Center alum Elizabeth McNie; and
- "Life after CSTPR" moderated by Roger Pielke, Jr.

Dr. John Holdren, Assistant to the President for Science and Technology, Director of the White House Office of Science and Technology Policy, Co-chair of the President's Council of Advisors on Science and Technology, gave the keynote address, "Science and Technology Policy in the Obama Administration."



Dr. Holdren's talk as well as photos from the event can be viewed at: <http://sciencepolicy.colorado.edu/news/10anniversary>.

CENTER EVENTS

CSTPR Fall Noontime Seminar Series

Our popular noontime seminar series continued this fall under the theme “The Communications-Policy Nexus Media, Messages, and Decision Making”. It featured the following talks:

- Sept. 11, The Contrarian Discourse In the Blogosphere: What Are Blogs Good For Anyway? Franziska Hollender, Institute for Social Studies of Science, University of Vienna
- Oct. 11, Communicating Climate Change: Lessons Learned at the National Snow And Ice Data Center, Mark Serreze, National Snow and Ice Data Center, Cooperative Institute for Research in Environmental Sciences
- Oct. 18, The Mythology of the Green Revolution, Roger Pielke, Jr., Center for Science and Technology Policy Research, University of Colorado Boulder
- Nov. 1, Mass Media in the Policy Process: Drafting A Comprehensive Approach To Policy Influence, Deserai Anderson Crow, Center for Science and Technology Policy Research, University of Colorado Boulder

- Nov. 15, Going Inside the Greenhouse: Exploring Creative Climate Communications in the Classroom, Max Boykoff, Center for Science and Technology Policy Research, University of Colorado Boulder and Beth Osnes, Theater and Dance, University of Colorado Boulder
- Dec. 13, Principles and Trends In Journalism, and Impacts on Climate Change Coverage, Tom Yulsman, School of Journalism & Mass Communication, University of Colorado Boulder

Audio recordings, Powerpoint presentations, and/or webcasts of each talk can be viewed at: http://sciencepolicy.colorado.edu/news/seminars_fall2012.html.

The theme for our spring semester noontime seminar series is “New Policy Research at CU and Beyond”. The talks, which will be held Thursdays at noon, will be available via live webcast and recordings of the talks will also be available online after the event. A link to the webcast will be provided in the notification of each talk to members of our mailing list. Visit our website: <http://sciencepolicy.colorado.edu> (lefthand column) to sign up for our mailing list.



Beth Osnes and Max Boykoff, November 15



Tom Yulsman, December 13

CENTER EVENTS

Other CSTPR Talks

- Aug. 1, The dynamics of vulnerability: Why adapting to climate variability may not always prepare us for climate change. Lisa Dilling, NCAR Workshop on Enhancing Diversity in Climate Change Science and Applications: From Models to Adaptation
- Aug. 1-4, Max Boykoff presented a paper at the International Studies Association meeting, Buenos Aires, Argentina
- Aug. 13, Max Boykoff was an invited speaker at the Greenhouse Scholars workshop
- Sept. 6, Usable science? The UK Climate Projections 2009 and Decision Support for Adaptation Planning. Samuel Tang, Centre for Risk Management, King's College London. View video of talk here: <http://cires.colorado.edu/calendar/events/index.php?com=detail&eID=604>

- Sept. 13, Who Speaks for the Climate? Making Sense of Media Reporting on Climate Change. Max Boykoff
- Oct. 19, The Role that Media Play in Influencing Renewable Energy Policy. Renewable Energy Law & Policy Summit: Driving the Development of Renewable Energy, Deserai Crow, University of Denver Sturm College of Law, Denver, CO
- Oct. 19, Is Communicating Climate Change a Lost Cause?, Max Boykoff, Society of Environmental Journalists' 22nd Annual Conference
- Dec. 17, Max Boykoff gave the keynote/plenary talk, Hebrew University of Jerusalem

NEW PUBLICATIONS

Boykoff, M. and B. Osnes (2012), Students Sprout Creative Communications on Climate Change Inside the Greenhouse. *Skeptical Science*, <http://www.skepticalscience.com/Students-sprout-creative-communications-climate-change-Inside-Greenhouse.html>.

Excerpt: "El Verde", the star of a student-created music video engaging Latino youth on the issue of climate change, takes a long drag on his cigarette, exhales, and re-inhales the smoke in through his nose. Cut to a shot of his silhouette against a sky of wind turbines generating clean energy as he raps in Spanish (the captions read) "My name is El Verde and with a bit of luck, the health of the world is not already f**ked". Welcome to 'Inside the Greenhouse' (ITG), a project at the University of Colorado-Boulder that we have embarked on with students. Read more: <http://www.skepticalscience.com/Students-sprout-creative-communications-climate-change-Inside-Greenhouse.html>.



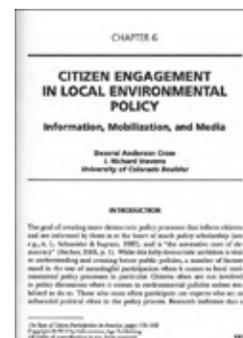
Crow, D.A. (2012). Policy Diffusion and Innovation: Media and Experts in Colorado Recreational Water Rights. *Journal of Natural Resources Policy Research*, 4(1), 27-41, http://sciencepolicy.colorado.edu/admin/publication_files/2012.18.pdf.

Abstract: Beginning in 1998, an innovation in water rights policy took place in Colorado. This paper analyses the diffusion of the recreational in-channel water right policy innovation among Colorado communities. This research involved in-depth case studies in 12 Colorado communities. Data include interviews, legal and legislative documents, and mass media coverage. These new water rights spread among Colorado communities through two processes. First, experts acted as information entrepreneurs providing both technical and policy information to other communities. Through repetitive journalistic sourcing, media coverage spread the influence and reputation of certain experts who then influenced internal policy decisions in subsequent communities. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2012.18.pdf.



Crow, D.A. and J.R. Stevens (2012), Citizen Engagement in Local Environmental Policy: Information, Mobilization, and Media. In H. Schachter & K. Yang (Ed.), *The State of Citizen Participation in America* 131-162, Information Age Publishing, http://sciencepolicy.colorado.edu/admin/publication_files/2012.19.pdf.

This book provides a state-of-the-art assessment of citizen participation practice and research in the United States. With contributions from a stellar group of scholars, it provides readers an overview of a field at the heart of democratic governance. Individual chapters trace shifts in participation philosophy and policy, examine trends at different government levels, analyze technology/participation interactions, identify the participation experiences of minority populations, and explore the impact of voluntary organizations on this topic. A five-chapter section illustrates innovative cases. Another section explores the role of various methodologies in advancing participation research. Read the chapter: http://sciencepolicy.colorado.edu/admin/publication_files/2012.19.pdf.



Crow, D.A. and J.R. Stevens (2012), Local Science Reporting Relies on Generalists, Not Specialists. *Newspaper Research Journal* 33 (3), 35-48, http://sciencepolicy.colorado.edu/admin/publication_files/2012.23.pdf.

Excerpt: News media continue to serve a gatekeeping role in the filtration of civic information needed for deliberation and serve an almost exclusive role as the purveyors of science and technological information. Americans remain generally uninformed when it comes to even the most basic political and public policy issues, and because this trend holds consistent for basic civic knowledge, one can imagine that the average citizen is particularly ignorant when it comes to the awareness and understanding of science and technical issues. Although science writers once saw their craft improving in quality and quantity, a recent decline in the number of science writers in print and broadcast media has been observed. For example, in 2010 the U.S. National Association of Science Writers (NASW) reported a 10 percent decline in membership from the year before, attributing the change to declining economic conditions. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2012.23.pdf.



Dilling, L. and E. Failey (2012), Managing Carbon in a Multiple Use World: The Implications of Land-Use Decision Context for Carbon Management. *Global Environmental Change*, http://sciencepolicy.colorado.edu/admin/publication_files/2012.30.pdf.

Abstract: Human land use contributes significantly to the growth of greenhouse gases in the atmosphere. Changes

in land management practices have been proposed as a critical and cost-effective mechanism for reducing greenhouse gas emissions and promoting the storage of additional carbon in vegetation and soils. However, many discussions of the potential for land use to mitigate climate change only take into account biophysical factors such as vegetation and land cover and neglect how the agency of land owners themselves affects whether additional carbon storage can be achieved. Unlike many potential REDD opportunities in developing countries, land management in the US to enhance carbon sequestration would occur against a backdrop of clearly defined, legally enforceable land ownership. In addition, more than a third of the land surface in the US is managed by federal agencies who operate under legal guidelines for multiple use and is subject to demands from multiple constituencies. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2012.30.pdf.



Hale, B. (2012), Getting the Bad Out: Remediation Technologies and Respect for Others. Chapter in: W.P. Kabasenche, M. O'Rourke, and M.H. Slater (Ed.), *The Environment: Philosophy, Science, and Ethics*, pp. 223-243, MIT Press, http://sciencepolicy.colorado.edu/admin/publication_files/2012.14.pdf.

Excerpt: Arguments for and against environmental remediation have tended to stress mitigation of harms while turning a blind eye to other moral considerations that inform our views on environmental wrongdoing (Nelson 2008, Singer 2006). In this paper, I focus the discussion much more narrowly. I inquire into the conditions that make some very narrow set of mitigation projects permissible, and seek to outline what those conditions might be. Ultimately, I aim at the conclusion that what makes an engineering project permissible is whether all affected parties can accept not just the side effects of the project, but also the legitimacy of the project itself. The problem for this paper should be contextualized as part of a much larger project oriented around addressing concerns in climate change mitigation and environmental remediation. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2012.14.pdf.



Hale, B. (2012), The World That Would Have Been: Moral Hazard Arguments Against Geoengineering. Chapter in: C.J. Preston (Ed.), *Engineering the Climate: The Ethics of Solar Radiation Management*, pp. 113-131, Lexington Books, http://sciencepolicy.colorado.edu/admin/publication_files/2012.15.pdf.

Excerpt: According to the United Kingdom's Royal Society Report on Geoengineering the Climate, "one of the main ethical objections to geoengineering" is the purported "moral hazard" (Royal Society, 2009, p.39). Roughly speaking, the moral hazard is the complication that the successful deployment of a geoengineering technology, or in some cases the mere possibility of the successful deployment of a geoengineering technology, may cause individual or collective actors to turn attention away from alternate solutions to the climate crisis. A cursory review of the arguments, however, suggests that there is a good deal of confusion about what, exactly, the unique moral hazard associated with geoengineering entails. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2012.15.pdf.



Hale, B. (2012), The Veil of Opulence. *New York Times*, August 12, <http://opinionator.blogs.nytimes.com/2012/08/12/the-veil-of-opulence>.

Excerpt: More than 40 years ago the philosopher John Rawls, in his influential political work "A Theory of Justice," implored the people of the world to shed themselves of their selfish predispositions and to assume, for the sake of argument, that they were ignorant. He imposed this unwelcome constraint not so that his readers — mostly intellectuals, but also students, politicians and policy makers — would find themselves in a position of moribund stupidity but rather so they could get a grip on fairness. Read more: <http://opinionator.blogs.nytimes.com/2012/08/12/the-veil-of-opulence>.



Pielke, Jr., R. A. (2012), Mad Cows, Hurricane Sandy, and Why We Need Strong Science Assessors. *Bridges 36*, Published December 2012. http://www.ostina.org/index.php?option=com_content&view=article&id=5994&Itemid=3237.

Excerpt: Last month in Berlin, I participated in the 10th anniversary conference of the German Federal Institute for Risk Assessment – the Bundesinstitut für Risikobewertung (BfR). The BfR is one of a number of European organizations that Catherine Geslain-Lanéelle, executive director of the European Food Safety Authority (EFSA), characterized at the conference as "the children



of Mad Cow disease.” This group of siblings includes the EFSA, departmental chief scientific advisors in the UK, and others. These organizations, and the conditions under which they were created, remind us that if science is to be well used in policy and politics, then strong institutions are necessary. This is a lesson continuously relearned, most recently in the United States in the aftermath of Hurricane Sandy. Read more: http://www.ostina.org/index.php?option=com_content&view=article&id=5994&Itemid=3237.

Pielke, Jr., R. A. (2012), Science, Sex, and the Olympics. Bridges 34, http://www.ostina.org/index.php?option=com_content&view=article&id=5936&Itemid=3237.

Excerpt: Early in the 19th century, the English poet Robert Southey explained that little girls are “sugar and spice, and all things nice” while little boys are “snips and snails and puppy dog tails.” Such descriptions are apparently not rigorous enough to determine who gets to participate in women’s events in the Olympics, so last month the International Olympic Committee (IOC) issued new regulations on the eligibility of athletes to participate in women’s events in the upcoming London Games. Read more: http://www.ostina.org/index.php?option=com_content&view=article&id=5936&Itemid=3237.



Pielke, Jr., R. A. (2012), Climate of Failure. Foreign Policy, August 6, http://www.foreignpolicy.com/articles/2012/08/06/climate_of_failure.

Excerpt: The heady days of early 2009, when advocates for global action on climate change anticipated world leaders gathering later that year around a conference table in Copenhagen to reach a global agreement, are but a distant memory. Today, with many of these same leaders focusing their attention on jumpstarting economic growth, environmental issues have taken a back seat. For environmentalists, it may seem that climate policy has dropped from the political agenda altogether. Read more: http://www.foreignpolicy.com/articles/2012/08/06/climate_of_failure.



Pielke, Jr., R.A. (2012), Basic Research as a Political Symbol. Minerva, http://sciencepolicy.colorado.edu/admin/publication_files/2012.20.pdf.

Abstract: The use of the phrase “basic research” as a term used in science policy discussion dates only to about 1920. At the time the phrase referred to what we today commonly refer to as applied research in support

of specific missions or goals, especially agriculture. Upon the publication of Vannevar Bush’s well-known report, *Science – The Endless Frontier*, the phrase “basic research” became a key political symbol, representing various identifications, expectations and demands related to science policy among scientists and politicians. This paper tracks and evaluates the evolution of “basic research” as a political symbol from early in the 20th century to the present. With considerable attention having been paid to the on-going evolution of post-Cold War science policy, much less attention has focused on the factors which have shaped the dominant narrative of contemporary science policies. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2012.20.pdf.



Pielke, Jr., R. A. (2012), Hurricanes and Human Choice. Wall Street Journal, October, <http://online.wsj.com/article/SB1001424052970204840504578089413659452702.html>.

Excerpt: [W]ith respect to disasters we really do make our own luck. The relatively low number of casualties caused by Sandy is a testament to the success story that is the U.S. National Weather Service and parallel efforts of those who emphasize preparedness and emergency response in the public and private sectors. Everyone in the disaster-management community deserves thanks; the mitigation of the impacts from natural disasters has been a true national success story of the past century. Read more: <http://online.wsj.com/article/SB1001424052970204840504578089413659452702.html>.



Pielke, Jr., R. A. (2012), Technology Was the Key Factor in Saving the Ozone Layer. China Dialogue, <http://www.chinadialogue.net/books/5297/en>.

Excerpt: Twenty five years ago, the Montreal Protocol on Substances that Deplete the Ozone Layer was introduced for signature by nations around the world. Since that time, the treaty has become arguably the most successful international environmental success story in history. It may also be the one which historians and policy analysts have argued about the most in an effort to draw lessons relevant to the climate debate. Read more: <http://www.chinadialogue.net/books/5297/en>.



Schroeder, H., M. T. Boykoff, and L. Spiers (2012), *Equity and State Representations in Climate Negotiations*, *Nature Climate Change*, <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate1742.html>.

Abstract: We have entered an era where ecosystems are dominated by humans in a globalized, interconnected and interdependent world — the Anthropocene. Large-scale global environmental changes and their broader impacts transcend national boundaries and raise difficult issues of justice. This makes government interventions through conventional rulemaking highly problematic. Over the past five decades, multilateral institutions and global governance mechanisms have emerged to address those environmental challenges, but with mixed success. To avert irreversible global change, fundamental and radical transformations of existing governance practices are now needed. Indeed, state function has shifted from “a role based in constitutional powers toward a role of coordination and fusion of public and private resources,” where states have become “increasingly dependent on other social actors”. Also, the boundaries between who constitutes an ‘authorized’ representative (and who does not) and who has agency have shifted. Experts have explored the question of who are considered ‘expert’ or ‘authority’ agents to speak for the climate, and how they do so. Read more: <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate1742.html>.



This paper has received international media coverage: Slow-paced UN talks need an overhaul, <http://www.timesofmalta.com/articles/view/20121120/environment/Slow-paced-UN-talks-need-an-overhaul.446135>; A Critical Call to Modernize Antiquated Climate Negotiations, <http://greenbuildingelements.com/2012/11/19/a-critical-call-to-modernize-antiquated-climate-negotiations>; UN climate negotiations are unfair, study finds, <http://www.cbc.ca/news/technology/story/2012/11/19/sci-un-modernize-climate-negotiations.html>; Glacial-paced U.N. climate talks need overhaul: researchers, <http://uk.reuters.com/article/2012/11/18/us-climate-talks-idUKBRE8AH0EK20121118>;

Poorer countries are losing out at UN climate negotiations, <http://www.scienceomega.com/article/705/poorer-countries-are-losing-out-at-un-climate-negotiations>.

Simmons, K. M., D. Sutter, and R. Pielke, Jr. (2012), *Normalized Tornado Damage in the United States: 1950–2011*, *Environmental Hazards*, December 5, http://sciencepolicy.colorado.edu/admin/publication_files/2012.31.pdf.

Abstract: In 2011, thunderstorms in the United States resulted in 550 deaths from tornadoes and more than \$28 billion in property damage, according to data from the US National Oceanic and Atmospheric Administration, with the vast majority of economic losses resulting from tornadoes. This article normalizes US tornado damage from 1950 to 2011, using several methods. A normalization provides an estimate of the damage that would occur if past events occurred under a common base year’s societal conditions. We normalize for changes in inflation and wealth at the national level and changes in population, income and housing units at the county level. Under several methods, there has been a sharp decline in tornado damage. This decline corresponds with a decline in the reported frequency of the most intense (and thus most damaging) tornadoes since 1950. However, quantification of trends in tornado incidence is made difficult due to discontinuities in the reporting of events over time. The normalized damage results are suggestive that some part of this decline may reflect actual changes in tornado incidence, beyond changes in reporting practices. In historical context, 2011 stands out as one of the most damaging years of the past 61 years and provides an indication that maximum damage levels have the potential to increase should societal change lead to increasing exposure of wealth and property. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2012.31.pdf.



A data file from this paper is posted on our website: http://sciencepolicy.colorado.edu/publications/special/normalized_tornado_damage.html.



NEW CSTPR VIDEO

Dr. John P. Holdren, science advisor to President Obama, gave the keynote lecture at CSTPR’s 10 year anniversary celebration. His lecture titled “Science and Technology in the Obama Administration” can be viewed at:

http://www.youtube.com/watch?feature=player_embedded&v=oUcZXOBGKR4

S&T Opportunities

Outreach and Research Coordinator, Forest, Rangeland Stewardship, Colorado State University

An interdisciplinary team at Colorado State University (CSU) is looking for a motivated individual with a strong background in applied rangeland ecology and management, and interest in working with diverse stakeholders on collaborative and participatory research projects, to serve as Outreach and Research Coordinator for an integrated research and outreach project focused on the development of State and Transition Models (STMs) in rangeland systems that incorporate sage-grouse as a response variable within an adaptive management framework. Read more: https://taurus.cnr.colostate.edu/apps/hr/search/admin/overviews/Position%20DescriptionOutreachResCoord10%2023%2012_carl_mfg%20Longfinal1.pdf. Deadline: December 31.

California Science and Technology Policy Fellowships

Offered by the California Council on Science and Technology (CCST), the California Science and Technology Policy Fellowships place professional scientists and engineers in the California State Legislature for one-year appointments. The fellowships are ideal for qualified applicants who are

interested in improving the interface between science and legislative decision-making and who want to learn the public policy decision-making process. Read more: <http://fellows.ccst.us>.

Media Internship - Spring 2013, Woodrow Wilson International Center for Scholars

The Science and Technology Innovation Program (STIP) at the Woodrow Wilson International Center for Scholars is currently seeking a media-focused intern for Spring 2013. The mission of STIP is to explore the scientific and technological frontier, stimulating discovery and bringing new tools to bear on public policy challenges that emerge as science advances. Specific project areas include: nanotechnology, synthetic biology, Do-It-Yourself biology, the use of social media in disaster response, serious games, geoen지니어ing, and additive manufacturing. Interns will work closely with a small, interdisciplinary team. For more information: <http://www.wilsoncenter.org/opportunity/media-internship-spring-2013>.

See more job opportunities at <http://sciencepolicy.colorado.edu/students/jobs.html>.

ABOUT US

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