

---

# Colorado Journal of International Environmental Law and Policy

---

Volume 23, Number 2

Summer 2012

© 2012 by

The Colorado Journal of International Environmental Law, Inc.

The Colorado Journal of International  
Environmental Law and Policy logo © 1989  
Madison James Publishing Corp., Denver, Colorado

ISSN: 1050-0391

## Subscriptions

	<u>Personal</u>	<u>Institutional</u>
Single Issue	\$15.00	\$25.00
Entire Volume	\$30.00	\$45.00

Payable in US currency or equivalent only. Check should accompany order.  
Please add \$5 per single issue for postage and \$15 per volume for overseas postage.

All correspondence regarding subscriptions should be addressed to:

Managing Editor  
Colorado Journal of International Environmental Law and Policy  
University of Colorado Law School  
Campus Box 401  
Boulder, CO 80309-0401 - USA

## Manuscripts

The *Journal* invites submission of manuscripts to be considered for publication. Manuscripts may be mailed to the address below or e-mailed directly to [cjielp@colorado.edu](mailto:cjielp@colorado.edu). Unsolicited manuscripts can be returned if accompanied by postage and handling fees of \$3.00 for 3rd class or \$5.00 for 1st class mail. Manuscripts should be sent to:

Lead Articles Editor  
Colorado Journal of International Environmental Law and Policy  
University of Colorado Law School  
Campus Box 401  
Boulder, CO 80309-0401 - USA

---

E-mail: [cjielp@colorado.edu](mailto:cjielp@colorado.edu)

Internet Site: <http://www.colorado.edu/law/cjielp/>



---

## Statement of Purpose and Editorial Policy

---

The *Colorado Journal of International Environmental Law and Policy* is an interdisciplinary journal dedicated to the examination of environmental issues with international implications. It provides a forum for: (1) in-depth analysis of the legal or public policy implications of problems related to the global environment; (2) articulation and examination of proposals and new ideas for the management and resolution of international environmental concerns; and (3) description of current developments and opinions related to international environmental law and policy.

The *Journal* has a diverse international audience including policy makers, scholars, and organizations concerned with environmental issues. Specific audiences include scholars and students at law schools, schools of international affairs, schools of public policy, programs of study involving the natural and social sciences, and officials in governmental and nongovernmental organizations.

The *Journal* is interested in articles submitted by authors that fall within this stated purpose. Authors uncertain whether their article is suitable for *Journal* publication are encouraged to contact the Editor-in-Chief to discuss the subject matter of their article.

Articles or other materials from authors may be accepted for publication prior to undergoing any editorial modifications. Such materials may also be conditionally accepted with the understanding that the author undertake major modifications prior to publication. Where appropriate, papers may be reviewed by experts within the relevant field to aid the *Journal's* publication decisions and editing processes. Article Editors will work with authors to refine the written product throughout the publication process, with the overall objective being to enhance the effectiveness of written communication.

---

Published twice annually by the  
Colorado Journal of International Environmental Law, Inc.  
University of Colorado Law School  
320 Wolf Law Building, Campus Box 401, Boulder, CO 80309-0401,  
an incorporated association of students sponsored by  
UNIVERSITY OF COLORADO LAW SCHOOL STUDENT FUNDS

---

Cite as: 23 COLO. J. INT'L ENVTL. L. & POL'Y \_\_\_\_ (2012).



---

# Colorado Journal of International Environmental Law and Policy

---

Volume 23, Number 2

Summer 2012

## Board of Editors

*Editor-in-Chief*

LINDSAY B. MASTERS

*Managing Editor*

NAREE CHAN

*Development Editor*

JASON OBOLD

*Production Editors*

ROBERT DONALD

CAROLINE BAKER

PRASANTHI PARITALA

*Articles Editors*

TACY HASS

JENA AKIN

JESSICA LOWREY

*Notes and Comments Editors*

JACQUELYN A. JAMPOLSKY

MATTHEW BURNS

JAMESY OWEN

## Associate Editors

ANGELA BANDUCCI ANNE MARIAH TAPP

## Staff Writers

JEREMY BAKER

LISA BAKER

BRITTA BECKSTEAD

JUSTIN BONEBRAKE

LUKE BONUCCI

LAUREN BUTLER

MORGAN FIGUERS

JEN FRIEDBERG

TED HEWITT

MICAH JONES

NORA KATZ

ABBY KIRKBRIDE

STEVEN LOUIS-PRESCOTT

BRIAN MONTROSE

MYSTERY MURPHY

MEGAN NELSON

ASHLEY PALOMAKI

KATHERINE PARKER

KRISTEN RICE

ANTHONY SANTOS

ROBBIE SCOTT

ERIC SKANKEY

RYAN THARP

LAUREN WALKER

GINA WEINBERGER

## Advisory Board

JAMES N. CORBRIDGE  
Professor Emeritus, *University of Colorado Law School*

MICHAEL GLANTZ  
Senior Scientist, *Environmental & Societal Impacts Group, National Center for Atmospheric Research*

ANITA HALVORSSEN  
Director, *Global Legal Solutions*

HOWARD KENISON  
Partner, *Lindquist & Vennum, P.L.L.P.*

WILLIAM L. THOMAS  
Counsel, *Clifford Chance US L.L.P.*

## Ex-Officio Advisory Board

MELISSA M. BONESS  
Attorney at Law

JEREMY BOTKINS  
Attorney at Law

DAVID BOWER  
Attorney at Law

ALAINA STEDILLE  
Attorney at Law

RICHARD MURRAY  
Attorney at Law

CHRISTOPHER F. KNUD-HANSEN,  
Attorney and Scientist,  
*SolarBee Pump Systems, Inc.*

JANET LEE  
Attorney at Law

RYAN MCGEE  
Attorney, *Davis Graham & Stubbs L.L.P.*

JOHN P. MORGAN  
Attorney, *Perkins Coie L.L.P.*

EZEKIEL PETERS  
Attorney at Law

CHRISTOPHER W. FRY  
Attorney at Law

BRANDON KARPEN  
Staff Attorney,  
*U.S. District Court, District of Idaho*

## Faculty Advisor

WILLIAM C. BOYD  
Associate Professor of Law  
*University of Colorado Law School*

---

# The University of Colorado Law School

---

## Law School Faculty, 2011-2012

### *Deans*

- PHILIP J. WEISER, *Dean, Charles Inglis Thompson Professor of Law, and Faculty Director and Founder of the Silicon Flatirons Center for Law.* B.A., Swarthmore College; J.D., New York University.
- KRISTEN A. CARPENTER, *Associate Dean for Faculty Development and Associate Professor of Law.* B.A., Dartmouth College; J.D., Harvard University.
- HELEN L. NORTON, *Associate Dean for Academic Affairs and Associate Professor of Law.* B.A., Stanford University; J.D., University of California, Berkeley.
- AHMED A. WHITE, *Associate Dean for Research and Professor of Law.* B.A., Southern University and A&M College; J.D., Yale University.
- WHITING LEARY, *Senior Assistant Dean for Students.* B.A., Williams College; J.D., University of Colorado.
- KRISTINE M. JACKSON, *Assistant Dean for Admissions and Financial Aid.* B.S., University of North Carolina; J.D., George Mason University.
- MIKE SPIVEY, *Assistant Dean for Outreach and Engagement.* B.A., Vanderbilt University; M.B.A., University of Alabama.
- TODD ROGERS, *Assistant Dean for Career Development.* B.S., Trinity University; J.D., University of Texas.

### *Emeritus Faculty*

- NORMAN F. AARONSON, *Clinical Professor Emeritus, Legal Aid and Defender Program.* A.B., Brandeis University; J.D., Boston University.
- CLIFFORD J. CALHOUN, *Professor Emeritus.* A.B., LL.B., Harvard University.
- HOMER H. CLARK, JR., *Professor Emeritus.* A.B., LL.D., Amherst College; LL.B., LL.M., Harvard University.
- JAMES N. CORBRIDGE, JR., *Professor Emeritus.* A.B., Brown University; LL.B., Yale University.
- TED J. FIFLIS, *Professor Emeritus.* B.S., Northwestern University; LL.B., Harvard University.
- H. PATRICK FURMAN, *Clinical Professor Emeritus, Legal Aid and Defender Program, and Director of Clinical Programs.* B.A., J.D., University of Colorado.
- DAVID S. HILL, *Professor Emeritus.* B.S., J.D., University of Nebraska.
- J. DENNIS HYNES, *Professor Emeritus.* B.A., LL.B., University of Colorado.
- HOWARD C. KLEMME, *Professor Emeritus.* B.A., LL.B., University of Colorado; LL.M., Yale University.
- WILLIAM T. PIZZI, *Professor Emeritus.* A.B., Holy Cross College; J.D. Harvard University; M.A. University of Massachusetts.
- WILLIAM E. RENTFRO, *Professor Emeritus.* B.A., University of Colorado; Th.M., LL.B., University of Denver.
- PETER N. SIMON, *Professor Emeritus.* B.S., M.D., University of Wisconsin; J.D., University of California, Berkeley.
- NORTON L. STEUBEN, *Professor Emeritus.* A.B., J.D., University of Michigan.
- ARTHUR H. TRAVERS, JR., *Professor Emeritus.* B.A., Grinnell College; LL.B., Harvard University.

### ***Tenured and Tenure-Track Faculty***

- WILLIAM BOYD, *Associate Professor of Law and Director of the Governor's Climate and Forests Task Force Project*. B.A., University of North Carolina, Chapel Hill; J.D., Stanford University; Ph.D., University of California, Berkeley.
- HAROLD H. BRUFF, *Nicholas Rosenbaum Professor of Law*. B.A., Williams College; J.D., Harvard University.
- ALEXIA BRUNET MARKS, *Associate Professor of Law*. B.A., Colgate University; M.S., Purdue University; Ph.D., Purdue University; J.D., Northwestern University.
- EMILY M. CALHOUN, *Professor of Law*. B.A., M.A., Texas Tech University; J.D., University of Texas.
- PAUL F. CAMPOS, *Professor of Law*. A.B., M.A., J.D., University of Michigan.
- DEBORAH J. CANTRELL, *Associate Professor of Law and Director of Clinical Programs*. B.A., Smith College; M.A., University of California, Los Angeles; J.D., University of Southern California.
- MING CHEN, *Associate Professor of Law*. B.A., Harvard University; J.D., New York University; Ph.D., University of California, Berkeley.
- RICHARD B. COLLINS, *Professor of Law*. B.A., Yale College; LL.B., Harvard University.
- JUSTIN DESAUTELS-STEIN, *Associate Professor of Law*. B.A., University of North Carolina, Asheville; J.D., University of North Carolina, Chapel Hill; LL.M., Harvard University.
- MIRANDA P. FLEISCHER, *Associate Professor of Law*. B.A., Duke University; J.D., University of Chicago; LL.M. New York University.
- VICTOR FLEISCHER, *Associate Professor of Law*. B.A., J.D., University of Chicago.
- WAYNE M. GAZUR, *Professor of Law*. B.S., University of Wyoming; J.D., University of Colorado; LL.M., University of Denver.
- ERIK GERDING, *Associate Professor of Law*. A.B., Duke University; J.D., Harvard University.
- MARISA AYA GRUBER, *Professor of Law*. B.A., University of California at Berkeley; J.D., Harvard University.
- LAKSHMAN D. GURUSWAMY, *Nicholas Doman Professor of International Environmental Law and Director of the Center for Energy and Environmental Security*. LL.B., Sri Lanka; Ph.D., University of Durham, U.K.
- MELISSA HART, *Associate Professor of Law and Director of the Byron R. White Center for the Study of American Constitutional Law*. B.A., Harvard-Radcliffe College; J.D., Harvard University.
- PETER HUANG, *Professor of Law and DeMuth Chair*. A.B., Princeton University; S.M., Harvard University; J.D., Stanford University; Ph.D., Harvard University.
- SARAH A. KRAKOFF, *Professor of Law and Wolf Nichol Fellow*. B.A., Yale University; LL.B., University of California, Berkeley.
- MARK J. LOEWENSTEIN, *Monfort Professor of Commercial Law*. A.B., J.D., University of Illinois.
- DAYNA BOWEN MATTHEW, *Professor of Law*. A.B., Harvard-Radcliffe College; J.D., University of Virginia.
- SCOTT A. MOSS, *Associate Professor of Law*. B.A., M.A., Stanford University; J.D., Harvard University.
- CHRISTOPHER B. MUELLER, *Henry S. Lindsley Professor of Procedure and Advocacy*. A.B., Haverford College; J.D., University of California, Berkeley.
- ROBERT F. NAGEL, *Ira C. Rothgerber Professor of Constitutional Law*. B.A., Swarthmore College; J.D., Yale University.



PAUL OHM, *Associate Professor of Law, Faculty Director of the Silicon Flatirons Information Technology and Intellectual Property Initiative, and Faculty Director of LL.M Program in Technology and Intellectual Property Law*. B.S./B.A., Yale University; J.D., University of California, Los Angeles.

SCOTT R. PEPPE, *Associate Professor of Law*. B.A., Cornell University; J.D., Harvard University.

CAROLYN B. RAMSEY, *Professor of Law*. B.A., University of California, Irvine; A.M., J.D., Stanford University.

PIERRE J. SCHLAG, *Byron White Professor of Constitutional Law*. B.A., Yale University; J.D., University of California, Los Angeles.

AMY J. SCHMITZ, *Professor of Law*. B.A., Drake University; J.D., University of Minnesota.

ANDREW SCHWARTZ, *Associate Professor of Law*. Sc.B., Brown University; J.D., Columbia University.

ANNA SPAIN, *Associate Professor of Law*. B.A., Denison University; J.D., Harvard University.

MARK SQUILLACE, *Professor of Law and Director of the Natural Resources Law Center*. B.S., Michigan State University; J.D., University of Utah.

HARRY SURDEN, *Associate Professor of Law*. B.A., Cornell University; J.D., Stanford University.

MARIANNE WESSON, *Professor of Law and Schaden Chair in Experiential Learning*. A.B., Vassar College; J.D., University of Texas.

CHARLES F. WILKINSON, *University's Distinguished Professor and Moses Lasky Professor of Law*. B.A., Denison University; LL.B., Stanford University.

### ***Clinical Faculty***

NORMAN F. AARONSON, *Clinical Professor Emeritus, Legal Aid and Defender Program*. A.B., Brandeis University; J.D., Boston University.

J. BRAD BERNTHAL, *Clinical Professor of Law, Faculty Director of the Silicon Flatirons Entrepreneurship Initiative, and Director of LL.M Program in Entrepreneurial Law*. B.A., University of Kansas; J.D., University of Colorado.

DEBORAH J. CANTRELL, *Associate Professor of Law and Director of Clinical Programs*. B.A., Smith College; M.A., University of California, Los Angeles; J.D., University of Southern California.

VIOLETA CHAPIN, *Associate Clinical Professor of Law*. B.A., Columbia College; J.D., New York University.

MARGARET ANN ENGLAND, *Clinical Professor, Legal Aid and Defender Program*. B.A., University of Michigan; J.D., University of Denver.

COLENE ROBINSON, *Clinical Professor, Juvenile and Family Law*. B.A., Valparaiso University; J.D., Loyola University School of Law, Chicago.

MICHAEL SOULES, *Clinical Associate Professor*. B.A., University of Michigan; M.S., University of California, Berkeley; J.D., Yale University.

JILL E. TOMPKINS, *Clinical Professor of Law and Director of American Indian Law Clinic*. B.A., The King's College; J.D., University of Maine.

### ***Legal Writing and Appellate Advocacy Faculty***

AL CANNER, *Legal Writing Professor*. B.A., Brandeis University; J.D., University of Colorado.

AMY BAUER, *Legal Writing Professor*. B.A., Duke University; J.D., William & Mary School of Law.

DEREK H. KIERNAN-JOHNSON, *Legal Writing Professor*. A.B., Princeton University; J.D., University of Michigan.

NATALIE MACK, *Legal Writing Professor*. B.S., University of South Carolina; J.D., University of Colorado.

GABRIELLE M. STAFFORD, *Legal Writing Professor*. B.A., University of Pennsylvania; J.D., Boston University.

TODD M. STAFFORD, *Legal Writing Professor*. B.A., Southern Methodist University; J.D., Duke University.

### ***Law Library Faculty***

ALICIA BRILLON, *Reference Librarian*. B.A., M.L.I.S., University of Washington; J.D., Seattle University.

GEORGIA K. BRISCOE, *Associate Director and Head of Technical Services*. B.S., Washington State University; M.A., University of San Diego; M.L.S., University of Michigan.

YUMIN JIANG, *Technical Services Librarian*. M.S., University of Illinois, Urbana-Champaign; M.A., University of Wisconsin.

ROBERT LINZ, *Head of Public Services and Associate Director of Law Library*. B.A., Wake Forest University; J.D., University of Florida; M.L.I.S., Florida State University.

SUSAN NEVELOW MART, *Associate Professor and Director of the Law Library*. B.A., University of California, Santa Cruz; J.D., Boalt Hall; M.L.I.S., San Jose State University.

ALAN PANNELL, *Reference Librarian*. B.A., University of Oklahoma; J.D., Western New England College; M.A. University of Arizona.

KAREN SELDEN, *Catalog Librarian*. B.S., Pennsylvania State University; M.L.S., Simmons College.

JANE E. THOMPSON, *Head of Faculty Services*. B.A., University of Missouri; M.A., J.D., University of Denver.

### ***Research Fellows and Associates***

DARRELL JACKSON, *Research Fellow, Byron White Center for Study of American Constitutional Law, Boulder, Colorado*. B.A., College of William and Mary; J.D., George Mason University; Ph.D., University of Colorado.

DOUGLAS S. KENNEY, *Research Associate, Natural Resources Law Center*. B.A., University of Colorado; M.S., University of Michigan School of Natural Resources and Environment; Ph.D., Cornell University.

KATHRYN M. MUTZ, *Research Associate, Natural Resources Law Center*. B.A., University of Chicago; M.S., Utah State University; J.D., University of Colorado.

JULIE TEEL, *Senior Research Associate, Center for Energy & Environmental Security*. B.S., University of California, Berkeley; J.D., New York University.



---

# Colorado Journal of International Environmental Law and Policy

---

Volume 23, Number 2

Summer 2012

## Table of Contents

### Articles

SUBNATIONAL CLIMATE MITIGATION POLICY: A FRAMEWORK FOR ANALYSIS GABRIEL WEIL .....	285
TEN YEARS OF THE AARHUS CONVENTION: HOW PROCEDURAL DEMOCRACY IS PAVING THE WAY FOR SUBSTANTIVE CHANGE IN NATIONAL AND INTERNATIONAL ENVIRONMENTAL LAW MARIANNE DELLINGER .....	309
PACIFIC RIM AND BEYOND: GLOBAL MINING, GLOBAL RESISTANCE AND INTERNATIONAL LAW KARI LYDERSEN .....	367

### Notes & Comments

IMPRESSIONS FROM DURBAN: COP-17 AND CURRENT CLIMATE CHANGE POLICIES JASON OBOLD, MATTHEW BURNS, AND CAROLINE BAKER.....	389
A SUSTAINABLE FRAMEWORK FOR INTERNATIONAL GREEN TECHNOLOGY TRANSFER MATTHEW BURNS .....	405
CIVIL JUSTICE IN THE MOUNTAINS: THE BOLIVIAN ANDES AS GROUNDS FOR CLIMATE REFORM JENA AKIN.....	433

LEADING BY EXAMPLE: THE FRACTURING RESPONSIBILITY AND  
AWARENESS OF CHEMICALS ACT OF 2011 AS A CATALYST FOR  
INTERNATIONAL DRILLING REFORM

JASON OBOLD..... 473

---

## Errata

---

The *Colorado Journal of International Environmental Law and Policy* issue Vol. 23, No. 1 (2012) contained a substantive error in *Free Market Environmentalism: Desalination as a Solution to Limited Water Resources in Northern Chile's Mining Industry*. At present, Chile has a Ministry of the Environment, which was created under *Ley 20.417* and replaced Chile's National Commission of the Environment (identified as "CONAMA" in the note).