

EMPLOYMENT HISTORY

Raphael J. Moses Professor of Natural Resources Law, University of Colorado Law School, 2018-present; Associate Dean for Faculty and Research, University of Colorado Law School, 2019-2020; Professor of Law, 2005-2018, Director, Natural Resources Law Center 2005-2013; Director, Natural Resources, Water, and Public Lands Program, Getches-Wilkinson Center, 2013-present

Faculty website: <http://lawweb.colorado.edu/profiles/profile.jsp?id=189>

Visiting Scholar, University of Melbourne Law School, Melbourne Australia, Feb-May, 2019

Visiting Professor and Scholar, University of Edinburgh Law School, Edinburgh, Scotland, Fall, 2012, May-June, 2015

Charles Fornoff Professor of Law and Values, University of Toledo College of Law, February 2005-July 2005; Professor of Law, August 2002 – February 2005

Professor, University of Wyoming, College of Law, July 1986 - July 2002; *Winston S. Howard Professor of Law*, July 1993-July 1996; Visiting Associate Professor, 1984 - 1985

Special Assistant to the Solicitor, U.S. Department of the Interior, Washington, D. C., May 2000 – January 2001

Visiting Associate Professor of Law, West Virginia University College of Law, Morgantown, West Virginia, 1995-1996

Director of Litigation: Environmental Policy Institute, Washington, DC. (*Legal representation for national environmental organization*), November 1981 - July 1984

Attorney Advisor: U.S. Department of the Interior, Office of the Solicitor, Washington, D.C., (Honors Program, 1978), October 1978 - October 1981

Seismic Analyst: Seismograph Service Corporation (Division of Raytheon Corp.), Alma, Michigan; Algiers, El Golea, and Ouargla, Algeria, July 1974 - August 1975

EDUCATION

University of Utah College of Law, Salt Lake City, Utah, J.D., May 1978. Top 10%; Associate Editor, *Utah Law Review*; Associate Editor, *Journal of Contemporary Law*; Co-founder, Natural Resources Law Forum

Michigan State University, East Lansing, MI, B.S. –Mathematics (*magna cum laude*), June 1974

U.S. CONGRESSIONAL TESTIMONY

Testimony Oil and Gas Production on Public Lands, Subcommittee on Energy and Mineral Resources, House Natural Resources Committee (June 29, 2017)

Testimony on the Bureau of Land Management's Planning 2.0 Initiative before the Subcommittee on Public Lands, Forests, and Mining, Senate Committee on Energy and Natural Resources (21 June 2016)

Testimony on H.R. 5259, Certainty for States and Tribes Act, before the Subcommittee on Energy and Mineral Resources, House Natural Resources Committee (14 June 2016)

Testimony on Federal Oil and Gas Leasing Policy before the U.S. House of Representatives Investigations, Oversight, and Regulations Subcommittee of the Small Business Committee (8 March 2012)

Testimony in support of the Obama Administration's Wild Lands Order before the U.S. House of Representatives Committee on Natural Resources (1 March 2011)

- Testimony on The Consolidated Land, Energy, and Aquatic Resources Act of 2009 (CLEAR Act) before the U.S. House of Representatives Committee on Natural Resources (17 September 2008)*
- Testimony on the Need for Legislation on Coal Ash Disposal before the U.S. House of Representatives Subcommittee on Energy and Mineral Resources of the House Committee on Natural Resources (10 June 2008)*
- Testimony in support of The Clean Water Restoration Act of 2007 (H.R. 2421) before the U.S. House of Representatives Committee on Transportation and Infrastructure (16 April 2008)*

OTHER PROFESSIONAL TESTIMONY AND GOVERNMENT ENGAGEMENTS

- Testimony before the Nevada Federal Lands Task Force (On the authority to claim ownership over federal public domain lands.), December 6, 2013*
- Meetings with Interior Department Officials on Reforming the Public Land Use Planning Process, February 20-21, 2014; April 10, 2016*
- Appointed to expert panel for Global Tailings Initiative, charged with developing an international standard for managing mine tailings. 2019-2020, <https://globaltailingsreview.org/>*
- Prepared report on Deep Seabed Mining for the Pew Foundation for the consideration of the International Seabed Authority established under the UN Convention of the Law of the Sea*

PUBLICATIONS

Books

- ENVIRONMENTAL DECISIONS AND THE PUBLIC INTEREST (*in progress*)
- ENVIRONMENTAL DECISIONMAKING FOR THE 21ST CENTURY (2016)
- NATURAL RESOURCES LAW AND POLICY (with Rasband and Salzman) (2004; 2nd ed., 2009, 3d ed. 2016)
- THE STRIP MINING HANDBOOK (1990; 2nd ed. 2012 (2d ed. [online only](#)))
- THE NEPA LITIGATION GUIDE (Co-editor with Al Ferlo and K. Sheldon) (1999; 2d ed. 2012)
- ENVIRONMENTAL LAW, Vol. 1: ENVIRONMENTAL DECISION-MAKING, (1989; 2nd ed., 1994 (with Battle and Fischman); 3rd ed., 2000 (with Fischman))
- ENVIRONMENTAL LAW: AIR POLLUTION, (1988; 2nd ed., 1992; 3rd ed., 1999)
- ENVIRONMENTAL LAW ANTHOLOGY (with Fischman and Lipeles) (1996)

Book Chapters

- Climate Change and Natural Resources, in GLOBAL CLIMATE CHANGE AND U.S. LAW (ABA, 3d ed. 2022) (with Sam Kalen)*
- The Role of the State in TOWARDS ZERO HARM—A COMPENDIUM OF PAPERS PREPARED FOR THE GLOBAL TAILINGS REVIEW, August, 2020*
- The Remarkable Legacy of John Wesley Powell, (with Travis Miller and Cody Phillips) in THE PIONEERS OF ENVIRONMENTAL LAW (expected 2020)*
- NEPA and Climate Change, in THE NEPA LITIGATION GUIDE (American Bar Ass'n, 2d ed. 2012)*
- Accounting for Water Rights in the Western United States, in INTERNATIONAL WATER ACCOUNTING: EFFECTIVE MANAGEMENT OF A SCARCE RESOURCE (2012)*
- Embracing a Civic Republican Tradition in Natural Resources Decision-Making, in THE EVOLUTION OF NATURAL RESOURCES LAW AND POLICY (2010)*

MANAGING COAL COMBUSTION RESIDUES IN MINES, Principal author of *Chapter 5: Current Regulatory Framework*, and a contributor to the entire book; (National Research Council of the National Academies, 2006)

The Antiquities Act and the Exercise of Presidential Power: The Clinton Monuments, in *THE ANTIQUITIES ACT: A CENTURY OF AMERICAN ARCHAEOLOGY, HISTORIC PRESERVATION, AND CONSERVATION* (2006)

Laws and Regulations Pertaining to Wetland Areas in the Intermountain West (co-author with Maureen Ryan), in *MANAGING WETLANDS IN THE INTERMOUNTAIN WEST*, (2004)

Wyoming Environmental Law (with Edward Harris, in *ENVIRONMENTAL LAW TREATISE* (1992)

Wyoming Water Law, in *WATER AND WATER RIGHTS TREATISE*, (1991; revised 1994, revised 2005)

Common Law Protection for Our National Parks, in *OUR COMMON LANDS: DEFENDING THE NATIONAL PARKS* (1988)

Articles

Accounting for Climate Impacts in Decisionmaking, (planned for submission in early 2023)

The Minerals Challenge for Renewable Energy, (Young Natural Resources and Energy Lawyers, 2nd Institute Proceedings, April 28, 2022) (planned for law review submission, summer 2023)

Best Regulatory Practices for Deep Seabed Mining: Lessons Learned from the U.S. Surface Mining Control and Reclamation Act, 125 *MARINE POLICY* 104327 (2021) (peer reviewed)

Restoring the Public Interest in Western Water Law, 2020 *UTAH L. REV.* 627 (2020)

Smart Planning for Unconventional Oil and Gas Development, 36 *ENV. & PLANNING L. J.* 489 (2019)

Rethinking Public Land Use Planning, 43 *HARV. ENV'T'L L. REV.* 415 (2019)

Presidents Lack Authority to Abolish or Diminish National Monuments, 103 *VA. L. REV. ONLINE* 55 (2017) (with E. Biber, S. Hecht, & N. Bryner)

Water Resources and the Public Interest, (XVIth World Water Congress in Cancun, Mexico, May, 2017, with Liber Martin, University of Mendoza, Argentina)

Managing Unconventional Oil and Gas Development as if Communities Mattered, 40 *VT. L. REV.* 525 (2016)

Marketing Conserved Water (with Anthony McLeod) 46 *ENVTL L.* 1 (2016)

Grazing in Wilderness Areas, 44 *ENVTL. L.* 415 (2014)

Meaningful Engagement in Public Lands Decisionmaking, 59 *ROCKY MTN. MIN. L. FND.* 21-1 (2013)

The Tragic Story of the Federal Coal Leasing Program, 27 *NAT. RES. & ENV.* 29 (Winter, 2013)

Water Transfers for a Changing Climate, 53 *NAT. RES. J.* 55 (2012)

The Water Marketing Solution, 42 *ENVTL L. REP.* 10800 (2012)

The Judicial Assault on the Clean Water Act, 59 *FED. LAW.* 33 (2012)

NEPA, Climate Change, and Public Lands Decision-making (with Alexander Hood), 42 *ENVTL. L.* 469 (2012)

Climate Change and Institutional Competence, 41 *TOLEDO L. REV.* 889 (2010)

Rethinking the Great Lakes Compact, 2006 *MICH. STATE L. REV.* 1347 (2007)

From Navigable Waters to Constitutional Waters: The Future of Federal Wetlands Regulation, 40 *MICH. J. L. REFORM* 799 (2007)

Let the People Speak: Notice and Comment Rulemaking (Lessons from the Controversial New Source Review Proposal of the Clean Air Act) (with Victor B. Flatt, Michael O'Hear, and Robert R.M. Verchick). 34 *ENV. L. REP. News and Analysis* 10115 (2004).

The Monumental Legacy of the Antiquities Act of 1906, 37 *GA. L. REV.* 473 (2003).

Managing Interjurisdictional Waters under the Great Lakes Charter Annex (with Zellmer). 18 NAT. RES. & ENV. 8 (Fall 2003).
Mining Law Reform, Administrative Style (with Patrick Garver). 45 ROCKY MTN. MIN. L. FND. 14-1 (1999).
Applying the Park City Principles to the Endangered Species Act, 31 LAND & WATER L. REV. 385 (1996)
An American Perspective on Environmental Impact Assessment in Australia, 20 COLUMBIA J. ENV. L. 43 (1995)
Transferring Indian Reserved Rights to Instream Flows: Lessons from the Big Horn Adjudication, 4 RIVERS 48 (1993)
One Hundred Years of Wyoming Water Law, 24 LAND & WATER L. REV. 93 (1991).
Water Marketing in Wyoming, 31 ARIZ. L. REV. 865 (1989).
A Critical Look at Wyoming Water Law, 24 LAND & WATER L. REV. 307 (1989).
The Enduring Vitality of the General Mining Law of 1872, 18 ENV. L. REP. News and Analysis 10261 (July 1988)
Cooperative Federalism Under the Surface Mining Control and Reclamation Act: Is this Any Way to Run a Government?, 87 W. VA. L. REV. 687 (1985), excerpted in ENVIRONMENTAL LAW REPORTER, News and Analysis, Vol. XV, p. 10039-10047 (1985)

Editorials and Short Pieces

[Mining Rider Would Gut Bedrock Environmental Law](#), The Hill, June 2, 2018
[Colorado Says Fishing Next to Private Land is Trespassing](#), High Country News, Syndicated Column for Writers on the Range, May 17, 2018
[The Looming Battle over the Antiquities Act](#), Harvard Law Review Blog, January 6, 2018
[Don't Blame Water Markets for Trouble with Western Rivers](#), Water Deeply, June 16, 2017
[National Monuments: Presidents Can Create Them, but Only Congress Can Undo Them](#) with E. Biber, S. Hecht, & N. Bryner), The Conversation, April 27, 2017
[The Endangered Antiquities Act](#), (with John Leshy), New York Times, March 31, 2017
[Why Obama's National Monument Decisions Should Stand](#), (with John Bernetic), CNN, Feb. 8, 2017
[Reclaim Our Coal Mines Now, Not Later](#), The Hill, June 29, 2016
[Managing Federal Coal as if Carbon Emissions Mattered](#), DENVER POST, December 11, 2015
[Managing Coal's Decline](#), WYOFIELD, August 11, 2015, available at, [Let's Protect All Our Nation's Waters](#), High Country News, Syndicated Column for Writers on the Range series, June, 2014
[High Time to Reform Federal Coal Leasing Program](#), MISSOULIAN, Sep 24, 2013 (with Tom Sanzillo)
[The Market Knows Best – The Real Story Behind Drilling on Public Lands](#), Huffington Post, June 13, 2013
[It's No Fun Being a Criminal: Colorado Ought to Allow River Access for All](#), Syndicated Column for High Country News, Writers on the Range series, February 19, 2010
An Endless Journey: Future of Roadless Areas Unresolved, DENVER POST: PERSPECTIVES, October 15, 2006.
Nibbling Away at a Good Law, DENVER POST: PERSPECTIVES, May 21, 2006.
Time for a Real Energy Plan, DENVER POST: PERSPECTIVES, August 21, 2005.

LITIGATION EXPERIENCE

Hill v. Warsewa, 947 F.3d 1305 (10th Cir. 2020) (representing plaintiff seeking right of public access to the bed of the Arkansas River) (The case is currently pending in the Colorado Supreme Court.)

- The Wilderness Society v. Trump*, (pending in the federal district court for the District of Columbia and involving the Grand Staircase-Escalante National Monument) (Pro bono co-author of amicus curiae brief filed on behalf of public lands law professors)
- Wyoming v. Zinke*, 871 F.3d 1133 (10th Cir. 2017), (Pro bono co-author of amicus curiae brief on behalf of environmental law and public lands law professors)
- High Country Citizens Alliance v. Clarke*, 454 F.3d 1177 (10th Cir. 2006), cert. denied, 550 U.S. 929 (2007) (Pro bono author of amicus curiae brief on behalf of administrative law and public lands law professors)
- Coalition for Sustainable Resources v. U.S. Forest Service*, 48 F. Supp.2d 1303 (D. Wyo. 1999) *aff'd.*, 259 F.3d 1244 (10th Circuit Court, 2001) (Pro bono counsel for Intervener, Biodiversity Associates)
- Friends of the Bow v. Thompson*, 124 F.3d 1210 (10th Cir. 1997) (Pro bono counsel: Friends of the Bow)
- Dorrance v. McCarthy*, 957 F.2d 76 1(10th Cir. 992) (Pro bono counsel: Intervener, National Wildlife Federation)
- Powder River Basin Resource Council v. Babbitt*, 54 F.3d 1477 (10th Cir. 1995) (Pro bono counsel for PRBRC)
- Illinois South Project v. Hodel*, 844 F.2d 1286 (7th Cir. 1988) Pro bono counsel for Illinois South Project
- National Wildlife Federation v. Hodel*, 839 F.2d 694 (D.C. Cir. 1988) (Pro bono counsel for various plaintiffs)
- Virginia Citizens for Better Reclamation v. Watt*, 20 BNA Env. Rep. Cases 2235 (4th Cir. 1984)
- Holmes Limestone Company v. Watt*, 655 F.2d 732 (6th Cir. 1982)
- Virginia Surface Mining and Reclamation Ass'n v. Andrus*, 483 F. Supp. 425 (W.D. Va. 1980), *rev'd sub nom.*, *Hodel v. Virginia Surface Mining Ass'n*, 452 U.S. 264 (1981)

INVITED PRESENTATIONS AND WORKSHOPS

- Public Lands Oil and Gas Development after the Inflation Reduction Act, (AALS Meeting, Section on Environmental Law, January 5, 2023)
- The Minerals Challenge for Renewable Energy, (*Young Natural Resources and Energy Lawyers, 2nd Institute*, Denver, CO April 28, 2022)
- Sustainable Water Markets (SWM) Program Annual Symposium: Water Systems in Overshoot: The Role of Markets in Building Resilience, *Market Approaches for Water in the Context of the Public Interest and Environmental Sustainability*, UC Santa Barbara, (Nov. 19, 2021)
- *A Tale of Two Species* (with Brad Jessup, University of Melbourne Law School), [Global Dialogue on Biodiversity Law and Governance: Transformative Pathways to “Living in Harmony with Nature”](#) (July 6-8, 2021)
- *Colorado River Basin: Drought, Water Use, and Native American Rights*, Environmental Law Summit, Tulane Law School, March 6-7, 2020
- *The New NEPA Proposals: The Environment’s Magna Carta on the Block*, Environmental Law Summit, Tulane Law School, March 6-7, 2020
- *Attacks on the Antiquities Act*, Georgetown Law School (5 June 2019)
- *Smart Planning for Unconventional Oil and Gas Development*, Melbourne, Australia, April 10, 2019
- *The Gloucester Decision*, University of Melbourne Law School, March 3, 2019 (Panel discussion with Jackie Peel of important decision from NSW Environment Court)
- *The 1906 Antiquities Act Meets Donald J. Trump*, Federal Bar Ass’n, Tri-State Seminar, Park City, UT (September 21, 2018)

- *Bears Ears and Beyond: Can Trump Dismantle National Monuments?*, Earth Summit, 2018, Tulane University Law School, March 9, 2018
- *The President's Authority under the Antiquities Act*, *The Real Property Trust and Estate Law Section of the American Bar Association*, webinar, 13 February 2018
- *Carver Colloquium Debate: To Shrink or Not to Shrink: Presidential Authority over National Monuments*, (Debate with James Rasband at Denver Sturm College of Law), November 20, 2017
- *Sustainable Water Markets Workshop*, presentation of paper on *The Public Interest in Western Water Law*, UC Santa Barbara, November 17-18, 2017
- *This Land is Whose Land? Renewed Legal Controversies over Public Lands*, ABA SEER, Fall Conference, Baltimore Maryland, October 19, 2017
- *Federalist Society Teleforum, The Antiquities Act & National Monuments*, September 26, 2017
- *ABA Webinar: What Can Environmental Lawyers Expect from the New Trump Administration and Congress?* Feb. 14, 2017
- *Environmental Law Boot Camp*, (presentations to congressional staff members in Washington D.C., with six colleagues from Harvard, Virginia, Vanderbilt, & Univ. of Washington) January 25, 2017
- *Environmental Policy in the Trump Administration*, Summit at Harvard Law School, December 2, 2016
- *Sustainable Water Markets Workshop*, Bren School UC Santa Barbara, November 18-19, 2016
- *Unbundling Water Rights: Piloting Efforts to Apply the Australian Experience in the American West*, Texas Water Law Institute, University of Texas Law School, Austin, Texas, November 3, 2016
- *Reclamation Liability under the Surface Mining Control & Reclamation Act (SMCRA)*, *U.S. Coal in the 21st Century: Markets, Bankruptcy, Finance, and Law*, The Sabin Center for Climate Change Law and the Center on Global Energy Policy at Columbia University, New York, New York, September 7-8, 2016
- *Managing Water Resources in the American West*, *Water Acquisition & Management for Oil & Gas Development: Legal & Regulatory Requirements*, RMMLF, Houston, Texas – April 7, 2016
- *Managing Unconventional Oil and Gas Development*, Denver University Law School seminar, February 8, 2016
- *Training Workshop on Coal Issues for NGOs in India*, New Delhi, India, February 26-March 5, 2016
- *Managing Unconventional Oil and Gas Development*, UC Santa Barbara, November 6, 2015
- *Environmental Rights as Human Rights: Understanding the Environmental Impacts of Unconventional Oil and Gas Development*, Vermont Law School, September 25, 2015
- *Marketing Conserved Water*, World Water Congress XV, Edinburgh, Scotland, May 25-29, 2015
- *NEPA Workshop*, Bill Cohen Summit, December 2-3, 2014, Perkins Coie, Washington, DC
- *Creating a Sustainable Water Supply*, United Nations Association of Boulder, UMC, October 26, 2014
- *Emerging Issues at the Intersection of Energy and Water*, Louisiana State University Law Center, October, 3, 2014
- *Grazing in Wilderness Areas*, Lewis & Clark Law School, April 10, 2014
- *Landscape Planning on Public Lands*, George Washington University Law School, March 13, 2014

SIGNIFICANT SERVICE

Draft Environmental Review of the Proposed Ortus Colorado Closed-Loop/Phantom Canyon Pumped Storage Project, (Prepared through the University of Colorado Office of Contracts and Grants)

Community Working Group, Comprehensive Flood and Stormwater Master Plan, City of Boulder 2020-222 (appointed by City staff)

Water Resources Advisory Board, City of Boulder, 2013-2018, chair, 2017-2018 (*appointed by Boulder City Council*)
Board of Directors, Earthworks, 2013-present
Standing Committee on Research Misconduct, University of Colorado-Boulder, 2015-present
Advisory Board, Western Mining Action Project, 2012-present
Trustee, Foundation for Natural Resources and Energy Law, (formerly the Rocky Mountain Mineral Law Foundation), 1996-2002, 2009 to present
Editor, Mineral Law Newsletter, Foundation for Natural Resources and Energy Law, 1991 to present
Vice-Chair, Public Lands and Land Use Committee, Section on Natural Resources, Energy and Environmental Law, American Bar Association, 1988–1998
Chair, Book Publications Committee, Section on Natural Resources, Energy and Environmental Law, American Bar Association, 1998-2001; Vice-Chair, 1995–1998, 2003 to present.
Member-at-Large (elected University-wide), University of Colorado Boulder Faculty Assembly, August 2008 – May, 2011
Member, Steering Committee, IUCN (The World Conservation Union), Environmental Law Commission, 1997 - 2005
Member, National Academy of Sciences, Committee on Mine Placement of Coal Combustion Wastes, November, 2004 - 2006
Board of Directors, Great Lakes United, 2004-2005
Chair, AALS Executive Committee on Environmental Law, January 2001 – January 2002 (Committee member, 1997-2003)

OTHER ACHIEVEMENTS

Designed and taught a Maymester course on Climate Change Policy in the Mont Blanc Region (two weeks in Boulder in the classroom; 8 days in Chamonix, France hosted by CREA Mont Blanc)
Visiting Professor, Jean Moulin Université, Lyon, France Summer, 2015, (taught International Water Law through a program sponsored by Louisiana State University)
Visiting Professor, University of Edinburgh Law School, Fall, 2012, (co-taught Comparative Environmental Law)
Clyde Martz Distinguished Teaching Award, Rocky Mountain Mineral Law Foundation, 2012
Visiting Professor, Oxford University, England, Summer 2010 (taught International Environmental Law through the Study Abroad program at the University of San Diego)
Committee Chairperson of the Year, University of Wyoming Faculty Senate Award, 1999-2000
Visiting Professor, Northwestern School of Law, Lewis & Clark College, Summer 1999
Distinguished Visiting Professor, Dickinson School of Law, October 1996
Fulbright Lecture/Research Award, The Australian National University, Canberra, Australia, 1993
Included lectures at the University of the South Pacific, Fiji, and throughout Australia
Legal Volunteer Award, Wyoming Outdoor Council, 1992