

# GWCC

GETCHES WILKINSON CENTER  
for Natural Resources, Energy, and the Environment

## GOVERNORS' CLIMATE AND FORESTS TASK FORCE

### GCF Governors Demonstrate Leadership in Global Climate Change Mitigation Through Historic Rio Branco Declaration

**O**n August 11, 2014, at the Governors' Climate and Forests Task Force (GCF) Annual Meeting in Acre, Brazil, sixteen GCF Governors from across the world launched the Rio Branco Declaration committing their states and provinces to reducing deforestation 80% by 2020 with adequate performance-based funding from the international community. Through the Declaration, the Governors pledged a substantial share of any pay-for-performance benefits that flow to GCF jurisdictions to forest-dependent communities, farmers, smallholders, and Indigenous Peoples. With 21 GCF Governors now endorsing the Rio Branco Declaration and additional Governors expected to sign on in the coming weeks, they are calling on donor countries, the private sector and civil society to work in partnership with them to help preserve the world's remaining tropical forests, to enhance livelihoods across their regions, and to develop clear and transparent mechanisms for securing and delivering performance-based benefits to forest-dependent communities.

... continued on page 4

---

## CONTENTS

2	Letter from the Executive Director	8	Energy
4	Governors' Climate and Forests Task Force	11	Water
5	A Message from the Chair of the Advisory Council	12	New Faculty & Staff
5	Distinguished Alum Profile	13	Student Group Updates
6	Native Communities and Environmental Justice	14	Recent Publications
		15	Recent Events
		16	Upcoming Events



COLORADO LAW  
UNIVERSITY OF COLORADO, BOULDER

# Dear Friends,

Last January, it was my honor and pleasure to become the Executive Director of the Getches Wilkinson Center for Natural Resources, Energy and the Environment at the University of Colorado Law School. As I noted then, both David Getches and Charles Wilkinson have been pivotal figures in my life and career, as friends and mentors, and I am excited to have the opportunity to work with the Center's tremendous faculty members and research team to continue to build its important legacy.

Over the last eight months, our Board of Directors and Advisory Council have engaged in a rigorous discussion about the future of the Center and what it has to offer to the Law School, the University, our community and country, and our fellow residents here on Planet Earth. Throughout those discussions, we have remained steadfast in our commitment to our vision and mission:

To serve the people of the American West, the nation, and the world through creative, interdisciplinary research, bold, inclusive teaching, and innovative problem solving in order to further true sustainability for our lands, waters and environment.

To emphasize that commitment to "true sustainability," we launched our inaugural **Martz Winter Symposium** in February, where we took an in-depth look at the concept of sustainability in the context of natural resource extraction and development. Drawing on the perspectives of numerous leaders from government, industry, NGOs, academia and civil society, we examined how to mainstream the idea of sustainability into the corporate culture of natural resources companies, how those companies can achieve greater and truer community acceptance, and how governments, communities, industry and NGOs can create more effective partnerships to make sustainability a central tenet of our economic, social and environmental future.

Our research and teaching programs have been as active as ever this year, and a variety of scholarship and activity from Center faculty and research staff are featured in this newsletter. The **Acequia Project**, led by Professor Sarah Krakoff and Advisory Council Vice-Chair Peter Nichols, continues to offer our students the opportunity to work with and learn from farmers and ranchers in Colorado's San Luis Valley. In August, the Rio Branco Declaration on deforestation was launched at the Annual Meeting of the **Governors' Climate and Forests Task Force** (whose Secretariat, led by Professor William Boyd, is housed within the Center) in Brazil. That development is described in the cover story of this newsletter, and serves as a prime example of how local governments

and communities are taking the lead in creating bottom-up solutions to issues such as climate change, water scarcity, biodiversity, and poverty eradication. That dynamic will serve as the theme for next February's Martz Winter Symposium, and factors front and center in much of the Center's current research and work programs.

Toward our mission of "innovative problem solving," a foundational premise of the Center is that the process of dialogue—open, inclusive, transparent, informed, sharp, and thorough—is a key component of ensuring the responsible management of natural resources, and of identifying and implementing the improved planning processes and policy innovations necessary to address the significant issues and challenges of the day. Our vision is to continue to provide well-structured platforms to promote this level of dialogue and engagement, together with rigorous, fact-based, economically sound research, which together will lead to creative policy approaches and public-private initiatives that can catalyze positive global change.

To that end, over the last eight months, we've hosted conferences and roundtables on the concept of **Social License to Operate** as applied to unconventional oil and gas operations; on the water quality and air quality implications of enhanced shale development, at our **Martz Summer Conference** in June; on the rise in distributed energy resources and the resulting implications for the electric power sector, as part of September's conference on **Understanding Disruptive Innovation: The Cases of Internet, Telecom and Electricity**; and on the future of wilderness activism in light of the 50th anniversary of the **Wilderness Act of 1964**. Later this fall, we look forward to welcoming Jim Burke, CEO of High Sierra Resources, who will deliver the **Schultz Lecture** in late October.

Throughout the year, we have enjoyed partnering with our CU colleagues at the American Indian Law Program, the Silicon Flatirons Center, the Colorado Natural Resources, Energy and Environmental Law Review, RASEI, the Center for the American West, and a host of other groups within the



# GWC Leadership & Staff

University system. We've also had the opportunity to collaborate with a variety of dynamic people and groups from around the country and world, including The Wilderness Society, the Center for the New Energy Economy at CSU, the Houston Advanced Research Center, and the Air-Water-Gas Sustainability Research Network.

We are very lucky to have a dedicated group of alumni, friends, and students who provide support, offer guidance, make introductions, speak at and assist with conferences and events, and champion our work and our mission. A special thanks to all of these friends whose help is so crucial to our continued success.

Finally, last February, the Center was fortunate to have Shaun LaBarre join us as Program Coordinator, responsible for running the day-to-day operations of the Center and acting as our primary point of contact with members of the Law School community and the public at large. Shaun has brought a high level of energy, creativity and professionalism to the position and has been a tremendous help in moving our program forward. In addition, I would like to thank our Board of Directors, led by Charles Wilkinson, our Advisory Council, led by Michael Gheleta, and our Dean, Phil Weiser, for their support and encouragement during my first few months at the Center. I look forward to working with them and with each of you as we continue to build on the legacy of the Center and the two men for which it is named.



*Britt Banks, Executive Director*

## Board

**Charles Wilkinson, Chair**  
Distinguished Professor  
Moses Lasky Professor of Law

**William Boyd**  
Associate Professor of Law

**Carla Fredericks**  
Associate Clinical Professor  
American Indian Law Program and Indian Law  
Clinic Director

**Michael Gheleta**  
Acting Assistant Solicitor,  
U.S. Department of the Interior

**Lakshman Guruswamy**  
Nicholas Doman Professor of  
International Environmental Law

**Audrey Huang**  
Associate Clinical Professor

**Sharon Jacobs**  
Associate Professor of Law

**Sarah Krakoff**  
Professor of Law

**Mark Squillace**  
Professor of Law

## Staff

**Britt Banks**  
Executive Director

**Julia Guarino**  
Getches-Wyss Fellow

**Carly Hernandez**  
Senior Project Associate

**Jacquelyn Jampolsky**  
Getches-Wyss Fellow

**Douglas Kenney**  
Senior Research Associate

**Caroline Kert**  
Project Coordinator

**Shaun LaBarre**  
Program Coordinator

**Kathryn Mutz**  
Senior Research Associate

**Amelia Peterson**  
Senior Research Fellow

**Matt Samelson**  
Research Associate

**Jackie Shi**  
Accountant

**Julie Teel Simmons**  
Senior Research Associate

## Senior Fellows

**Marilyn Averill**

**Robert Hallman**

**Larry MacDonnell**

**Karin Sheldon**

**Brad Udall**

**Senator Timothy Wirth**

## Visiting Scholars in Residence

**Tony McLeod**

**Sandra Zellmer**

## Advisory Council

**Michael Gheleta (Chair)**  
U.S. Department of the Interior  
Lakewood, Colorado

**Peter Nichols (Vice-Chair)**  
Berg Hill Greenleaf Ruscitti  
Boulder, Colorado

**Lance Astrella**  
Astrella Law, PC  
Denver, Colorado

**Marilyn Averill**  
Center for Science and Technology  
Policy Research  
University of Colorado, Boulder

**John Echohawk**  
Native American Rights Fund  
Boulder, Colorado

**Tom Fredericks**  
Fredericks Peebles & Morgan LLP  
Louisville, Colorado

**Ann Getches**  
Central Building  
Development Company  
Boulder, Colorado

**The Honorable Greg Hobbs**  
Colorado Supreme Court  
Denver, Colorado

**Guy Martin**  
Perkins Coie  
Washington, DC

**Zach Miller**  
Davis Graham & Stubbs  
Denver, Colorado

**Ann Morgan**  
National Wildlife Federation  
Boulder, Colorado

**Clay Parr**  
Parr Brown Gee & Loveless  
Salt Lake City, Utah

**David Phillips (Emeritus)**  
Rocky Mountain Mineral  
Law Foundation (Retired)  
Westminster, Colorado

**Teresa Rice**  
Encana Oil & Gas (USA), Inc.  
Denver, Colorado

**Karin Sheldon**  
Four Echoes Strategies  
Boulder, Colorado

**Stevia Walther (Ex officio)**  
Rocky Mountain  
Mineral Law Foundation  
Westminster, Colorado



# GCF Governors Demonstrate Leadership in Global Climate Change Mitigation Through Historic Rio Branco Declaration

... continued from page 1

A recent analysis by the Earth Innovation Institute found that an 80% reduction in deforestation by 2020 in GCF states and provinces would result in 3.8 billion tons of avoided CO<sub>2</sub> emissions. Working with very small budgets, tropical states and provinces of the GCF have already reduced emissions by more than 3 billion tons of CO<sub>2</sub> since 2005. GCF efforts demonstrate the critical role of the jurisdictional approach to low emissions development in climate mitigation. However, these gains can only be sustained and scaled up through systemic change in global supply chains. Both public and private investment is needed. Through the Rio Branco Declaration, GCF governors are calling upon the international community to partner with GCF states to enable large-scale, integrated transitions to sustainable development. The Declaration invites partnerships between GCF states and private sector initiatives aimed at achieving deforestation-free supply chains (such as the Consumer Goods Forum).

Currently at a membership of 26 states and provinces from Brazil, Indonesia, Mexico, Nigeria, Peru, Spain and the United States, the GCF is a platform for collaboration among states and provinces that work to protect tropical forests and reduce emissions from deforestation and forest degradation (REDD+), creating strategies for a sustainable form of development. Launched in 2009, the GCF is now one of the primary efforts to incorporate REDD+ into subnational, national and international policies. Approximately 25% of the world's tropical forests are in GCF states and provinces, including more than 75% of Brazil's, 75% of Peru's, and more than half of Indonesia's. GCF states and provinces are on the front lines of the effort to reduce tropical deforestation, protect the global climate system, and improve rural livelihoods. The GCF includes the state of California, the only jurisdiction in the world that is considering provisions that would recognize offsets from REDD+ as part of its greenhouse gas compliance system. California Air Resources Board Chairman, Mary D. Nichols stated: "Without action to reduce emissions from the deforestation of tropical forests, we are missing one of the keys to mitigating climate change. We think the sector-based offset crediting approach being evaluated for jurisdiction-wide programs, like the one in Acre, is the next frontier for California's carbon offset program, and we are pleased to be part of the efforts of the Governors' Climate & Forests Task Force." Speaking at the signing of the Rio Branco Declaration, Governor A. Teras Narang of Central Kalimantan, Indonesia remarked: "GCF members come from different provinces and countries, but we have a common goal—to protect forests and build sustainable environments

for improved livelihoods for all, both now and into the future. That future is now."

The GCF Secretariat is housed at the University of Colorado Law School, under the leadership of Professor William Boyd, GCF Senior Advisor & Project Lead and a team of four (Julie Teel Simmonds- GCF Project Manager, Carly Hernandez- Senior Project Associate, Caroline Kert- Project Administrator, and Amelia Chizwala Peterson (CU Law LL.M '11) - Senior Research Associate).



Left to Right; Regional President José Berley Arista Arbildo, Amazonas, Peru; Governor M.H. Cornelis, West Kalimantan, Indonesia; Governor Tiao Viana Acre, Brazil

**Under the leadership of Professor William Boyd, the University of Colorado Law School serves as the Secretariat for the Governors' Climate and Forests Task Force (GCF), a platform for collaboration among 26 states and provinces in 7 countries that are working to protect tropical forests through reducing emissions from deforestation and forest degradation (REDD+) and other low emissions development strategies.**

---

## A MESSAGE FROM THE CHAIR OF THE ADVISORY COUNCIL

By Michael Gheleta

This has been a dynamic time for the Advisory Council of the Getches-Wilkinson Center and those serving on it. The Council and the Board have determined that Advisory Council will begin a “tri-executive” leadership structure. Under this structure, there will be not only a current Advisory Council Chair, but also a past Chair and an incoming Chair who be active and participate in meetings of the Center’s Board. As I complete seven years as the Advisory Council Chair of the Getches-Wilkinson Center and its predecessor the Natural Resources Law Center, I am very pleased to report that Advisory Council member Peter Nichols has agreed to serve as the next Chair, beginning summer 2015.



Peter has made important contributions to the Acequia Project overseen by Professor Sarah Krakoff, and we look forward to even more outstanding work as he transitions into the Advisory Council Chair role. Other Advisory Council members have been active recently with Center projects as well. Many thanks to Justice Greg Hobbs and to Karin Sheldon, for their participation in the Center’s program “Celebrating the Great Law: The Wilderness Act at 50.” The United States has many groundbreaking public land laws, and the 1964 Wilderness Act is certainly among the most important. I consider myself fortunate to have learned about the Wilderness Act, and to have studied Public Land Law, in a Colorado Law class taught by one of the preeminent natural resources scholars of our time—Professor David Getches.

Beyond my involvement with the Getches-Wilkinson Center, this has been a time of change and of new personal challenges in my professional career. Starting in July 2014, I was asked to serve as Acting Assistant Solicitor for Water and Power in the U.S. Department of the Interior. While I have worked in the federal government for nearly 20 years, with both the Justice and Interior Departments, my positions have been based in the western states, including California, Arizona and Colorado. This will be the first opportunity I have had to work in a Washington, D.C. based position. Already I have enjoyed spending time in the halls, offices and conference rooms of Main Interior, as well as getting to know DC during my stints there in this new position. But while DC may be an exciting and inspiring place, given the location and nature of water issues in our nation, rest assured I will continue to spend a lot of time in Colorado and the West!

---

## DISTINGUISHED ALUM PROFILE

### Anne Castle ('81)

Distinguished Colorado Law Alum Anne Castle was confirmed as Assistant Secretary for Water and Science at the Department of the Interior on June 19, 2009. In this capacity, Castle has overseen water and science policy and has responsibility for the U.S. Bureau of Reclamation and the U.S. Geological Survey.



Before joining Interior, Castle practiced law for 28 years in Denver, Colorado with the Rocky Mountain based law firm of Holland & Hart LLP. She specialized in water issues, including litigation and multi-party negotiations, water related transactions, and advice on water policy and strategy. Her clients spanned a wide spectrum of water users and suppliers, from small and large municipal water and wastewater treatment providers to farmers and ranchers, water and conservation districts, and operators of commercial facilities.

In 2007, Colorado Governor Bill Ritter appointed Castle to the South Platte River Basin Task Force, which examined the water crisis in this northeastern Colorado basin, and its challenges for water users, and provided recommendations for legislative changes that continue to be explored. Castle was twice appointed to the Colorado Ground Water Commission by former Colorado Governor Roy Romer and served from 1994 to 2002.

During her legal career, Castle served on the board of Colorado Legal Services for over 25 years, and was on the board of the Colorado Legal Aid Foundation and the Colorado Lawyer Trust Account Foundation for many years. The Women’s Vision Foundation selected Castle for its prestigious Woman of Vision award in 2008, recognizing positive, enlightened leadership and active promotion of the advancement of women within the law firm and in the community.

Castle received a Bachelor of Science degree in applied mathematics, with honors, from the University of Colorado, College of Engineering, in 1973. Her J.D. in 1981 was also from the University of Colorado where she was Order of the Coif.

Anne Castle is set to depart from the Department of the Interior at the end of September this year (2014). She leaves this position having garnered tremendous respect from her peers for her tremendous leadership of and active engagement in a broad range of programs. The University of Colorado Law School is proud to call her a distinguished alum. Anne’s first order of business following her departure: a long hike with her daughter.

# The Acequia Project

*Overseen by Professor Sarah Krakoff*

**H**ispanic farmers and ranchers in the San Luis Valley, many of whom are descendants of Spanish and Mexican settlers who arrived here long before Colorado became a state, irrigate from acequias rather than conventional mutual irrigation ditches. Acequias, which are gravity-fed, earthen irrigation channels, operate according to principles of equity in times of scarcity. When water is low, farmers on the acequia reduce their use proportionately so that everyone can irrigate at least some of their crops. Acequia principles therefore run counter to general western water law, which operates by the rule of “first in time, first in right:” all senior water rights holders are entitled to their full share before any junior user can get any. Acequias differ from conventional ditches in other ways too. They are centers of cultural life in the Valley, and rely on community labor and mutual aid. They support sustainable agricultural practices, and preserve healthy riparian areas and other ecosystem services. As they say in the Valley, “water is life,” and without acequias, there would be no water.

For two years now, students at Colorado Law have been doing their part to assist farmers in the Valley to protect acequias from new and longstanding threats. New threats include increasing water scarcity due to drought, which climate change is likely to exacerbate. Longstanding challenges include the poor fit between acequia norms and the state legal system, and a history of marginalization of acequia rights. The Acequia Project—founded in the summer of 2012 by Professor Sarah Krakoff, Peter Nichols, Colorado Law '01, and Sarah Parmar, Colorado Open Lands—allows students the unique opportunity to work on these issues starting in their first year.

Students assist acequias and their members, known as *parciantes*, in two ways. First, a 2009 Colorado statute—the Acequia Recognition Law—finally recognized acequias as unique legal entities, and empowered them to adopt rules that will allow acequias to retain their traditional equitable governance and allocation norms. Students, together with a supervising attorney, help interested acequias draft and adopt bylaws that take advantage of the new law. To date, 25 students have assisted seven acequias, and we expect to add three or four new acequia clients each year. Second, students help farmers to protect their water rights by filing claims on their behalf in water court. Many *parciantes*, despite the longstanding nature of their rights, lack formal decrees. As pressure mounts in the region to divert water to other users, the informal nature of their irrigation puts them at risk of having their water cut off entirely. Nine students are assisting five different groups of *parciantes*, under the supervision of experienced water law attorneys.

According to Blake Busse, '15, one the stars of the Acequia Project, “the Project reminded me why I came to law school. It’s the best thing I’ve done here.” Blake has worked on several by-laws cases and a water rights case. He has made many trips down to the Valley to meet with his clients and conduct research in dusty archives. Blake, along with other Acequia Project students, has also cleaned ditches, eaten great chile, and seen beautiful Valley sunsets. Megan Gutwin, '16, joined the Project last year, during her first semester. “I wanted to get involved in something real my first year so I wasn’t just lost in my casebooks.” Megan has been assisting the Vallejos acequia with its bylaws, as well as working with Professor Krakoff to draft orientation documents and practice manuals to help the next wave of Acequia Project student volunteers. The Acequia Project exists to serve the low-income farmers in the Valley and to immerse students in a unique environmental justice community, but we could not do any of this work without our invaluable partners: the Sangre de Cristo Acequia Association, Colorado Open Lands, and our supervising attorneys Allan Beezley, Sarah Pizzo, and Drew Peternell. In addition, we are grateful for funding for student travel and other expenses from CU’s Outreach Council, the Rocky Mountain Mineral Law Foundation, and the Valerie Gates Foundation.

## Colorado Acequia Handbook

Students in the Acequia Project, led by Jens Jensen, Colorado Law '14, drafted the Colorado Acequia Handbook, which will be translated into Spanish and circulated at the upcoming Congreso for Acequias in the San Luis Valley on October 11, 2014. The Handbook will be distributed free of charge, and will also be available for downloading through the Getches-Wilkinson Center web page.





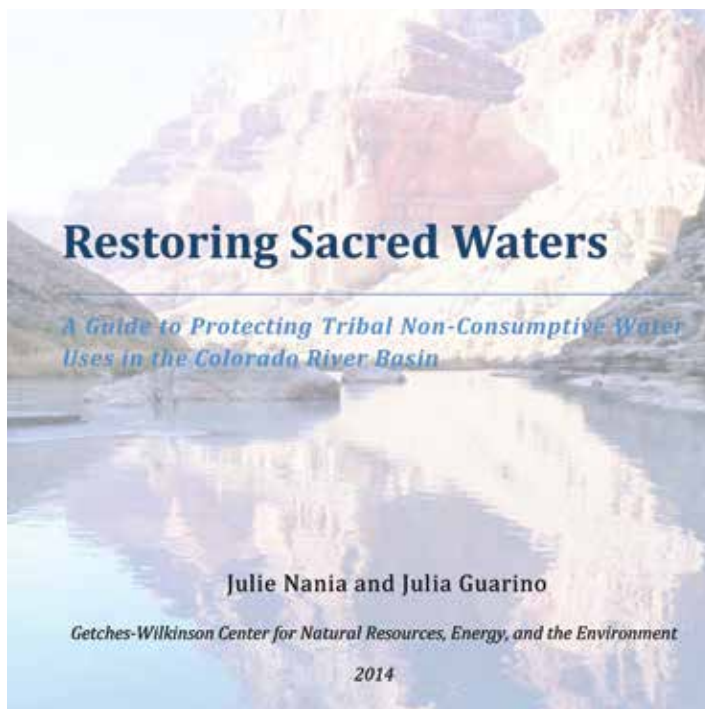
# Restoring Sacred Waters

A New Water Policy Guide for Tribal Leaders Released by the GWC's Colorado River Governance Initiative

**R**estoring Sacred Waters: A Guide to Protecting Tribal Non-Consumptive Water Uses in the Colorado River Basin is a detailed review of strategies available to tribes seeking to protect non-consumptive uses of their federal reserved rights. It surveys potential legal and political hurdles that tribes may encounter when applying their rights to instream flows and offers practical strategies derived from case studies and the advice of tribal officials on how to surmount these hurdles. Strategies outside of the application of Indian federal reserved rights are also explored, including how federal environmental laws and conservation easements have been used to create additional flows in reservation streams.

The Guide was authored by GWC researchers **Julie Nania** and **Julia Guarino**, with guidance from attorneys and tribal leaders and the support of a grant from the Walton Foundation. The legal and water policy staff for the Colville Confederated Tribes and the Salish and Kootenai Tribes deserve special thanks for the time they took to discuss their water policy strategies and goals, and to review the Guide.

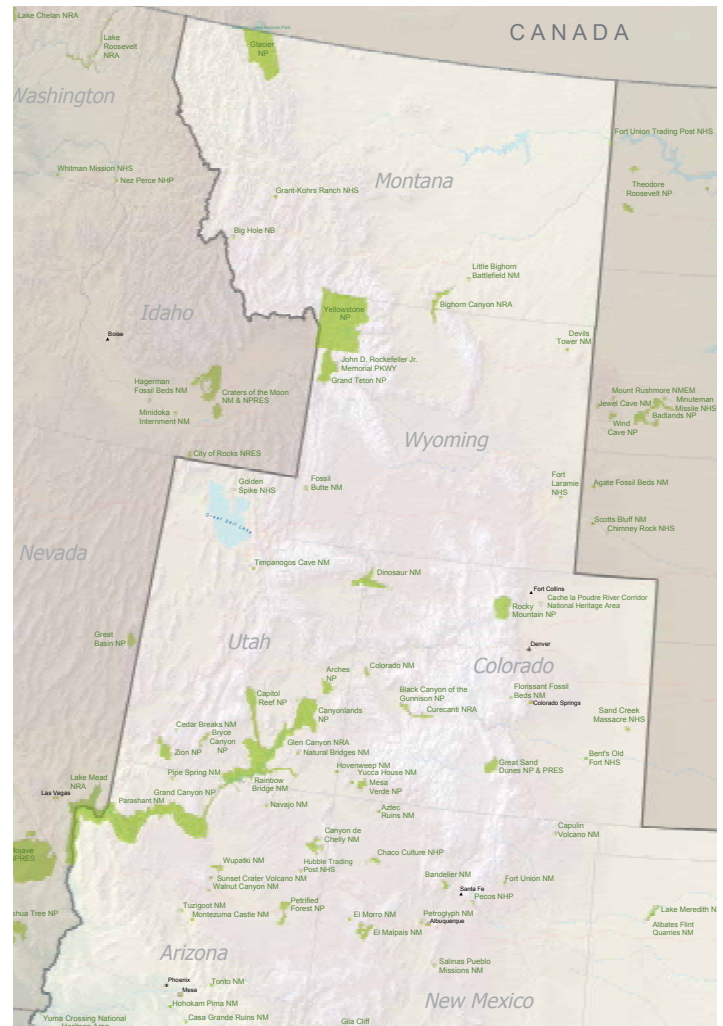
The goal of the Guide is to provide tribal leaders and policy makers in developing an effective and individually appropriate strategy for protecting tribal non-consumptive water uses. The Guide can be found on the Colorado River Governance Initiative website: [waterpolicy.info/projects/CRIP/index.html](http://waterpolicy.info/projects/CRIP/index.html).



# National Park Service Treaty Research Project

American Indian Law Program

**T**he University of Colorado Law School has been awarded a three-year grant to study treaty-based associations between American Indian tribes and units of the Intermountain Region of the National Park Service ("NPS"). The Intermountain Region includes all of the NPS units located within the states of Arizona, Colorado, Montana, New Mexico, Oklahoma, Texas, Utah, and Wyoming. Selected for its expertise in American Indian law and public lands law, the CU Law team will conduct research to help the NPS fulfill its commitment to inventory and document critical information about resources and to make the information available to park managers, tribes, researchers, and visitors. Working under the supervision of Professor Kristen Carpenter, researchers will use methodologies ranging from archival and legal research to ethnographic field interviews to produce a final report.



# Roundtable Discussion on Shale Development and Social License to Operate

By Robert Hallman, Senior Fellow

**E**arlier in 2014, the Getches—Wilkinson Center sponsored a roundtable addressing the potential social and environmental impacts of unconventional oil and gas production, with a focus on the concept of “social license to operate”—what it means, where it comes from, and how it is earned or lost. This note summarizes the key themes and conclusions that came out of these discussions.

As a first principle, participants agreed that social license to operate requires, and is primarily based on, reasonable transparency and accountability, and most importantly, public trust. A key focus of the discussions was how can industry earn and maintain the public’s trust regarding shale gas development.

There was general agreement that efforts to assert and/or expand local control of shale gas development are growing and will continue to increase. Reasons include:

- enhanced shale development—admittedly an industrial activity—in urban and other populated areas—many with little if any historical connection to the oil and gas industry—which, among other things, exacerbates potential conflicts between surface rights and mineral rights owners;
- organized efforts by several national environmental groups to support efforts including litigation to assert local control; and
- growing media (including social media and film) attention to alleged environmental, public health and community impacts of proposed shale development activities.

Whether the objectives of those seeking greater local control are to ban, regulate, and/or to enhance community benefits relating to, shale development, there was little doubt that more local control changes the relative bargaining power of the stakeholders and the politics of seeking to resolve disputes.

There was general agreement that industry’s traditional approach to community and NGO concerns—basically “trust us, we have been doing this for decades without reported problems and the community will prosper from operations”—has been ineffective and is viewed by many as unresponsive to the public’s concerns. Simply put: the industry’s burden to demonstrate acceptable risks and net community benefits appears to be growing at the same time as it is apparently losing (or has lost) much of the public’s trust. One participant stated that industry does not have the public’s trust and is not good at communicating (“we sell a commodity”). Another reported that recent industry efforts to explain hydraulic fracturing on the web raised more questions than it answered. On the other hand, it was noted that there is a



new generation of leaders at some companies with a different perspective on industry’s role who should be consulted.

Participants generally felt that more regulation—at least at the state level—does not appear likely to reduce public concerns and desire for local control—Colorado being an excellent example with a strong set of regulations but growing push for local control. Several reasons were noted for apparent lack of public trust in regulators:

- insufficient resources for effective implementation and enforcement of regulatory programs;
- perception of asymmetrical and well-funded influence and ability to delay by industry on regulators; and
- lack of authority and/or ability to address key social, economic and community impact concerns.

Most participants generally agreed that more engagement among key stakeholders is needed to reduce the growing gridlock and hopefully enable the potential benefits of shale development (e.g., jobs, economic growth, reduced carbon pollution) to be realized. One participant called for a focus on a national conversation rather than policy at the federal level, as well as “deep community engagement” by industry. Industry representatives generally acknowledged that their messaging is not working, but expressed concern that no messaging appeared likely to engage persons committed to banning shale development based on opposition to fossil fuels in general or on the belief that shale development is inherently dangerous. Industry participants also expressed frustration that the public’s concerns and regulatory requirements (or collectively the “goal posts”) are



frequently changed (or “moved”)—which undercuts two key conditions for industry to operate effectively: regulatory certainty and the ability to control costs. Another participant asserted that changing concerns and requirements are inherent in any dynamic, regulated business and the ability to adapt is an essential element of effective competition. One industry representative noted however that the industry is not monolithic—large and small operators often have different resources and capacities to adapt, as well as business plans and strategic interests. Another noted that industry in Colorado had achieved some success in gaining acceptance of development by negotiating Memorandums of Understanding with local governments and/or communities setting out mutually acceptable operating terms.

In terms of fostering public trust and/or reducing public concerns, one participant suggested that industry should formulate shale development plans which provide long-term, economic benefits to impacted communities, even at the expense of maximizing short-term profits, and be willing to provide increased support for renewable energy sources. Another suggested that technological innovation could remove many key impact concerns, particularly given industry’s impressive record of technological advances, and deserved greatly increased effort and funding. In this connection it was suggested that creative ways should be explored to increase private sector funding for technology development such as devoting a certain portion of royalty payments (which potentially could be increased for this purpose) to research and development.

It was also noted that a credible, accessible source of real-time baseline, operating and monitoring data regarding, for example, environmental and public health concerns, could serve to provide concerned stakeholders with an acceptable basis to assess risks of on-going operations and alternatives. Without such a database, the “debate”—as is now mostly the case—consists largely of dueling assertions based on little, if any, data viewed as reliable by all stakeholders. While some data gathering requirements are being proposed and enacted in a few jurisdictions, and industry apparently has gathered various forms of data over the years, it was generally acknowledged that there are significant data gaps which, if addressed, could assist in building public trust.

One participant noted that for any engagement process to succeed, all parties would need to “check their hypocrisy at the door,” and the goal should be to “bridge the polarities,” i.e., opponents accept the fact that shale gas development is here to stay and work to achieve acceptable standards and performance, and industry accept that it needs to engage with concerned stakeholders on an in depth, substantive basis. Another suggested the mutual goal should be sustainable development (economic, environmental and social) for impacted communities. Others commented that there is an apparent leadership gap (in public and private sectors) in terms of fostering meaningful engagement and that “thought leaders” were needed; and noted that the recent agreement among the Environmental Defense Fund and several energy companies regarding control of methane

emissions in Colorado could serve as a useful model for further stakeholder collaboration.

Finally it was observed that, unless messaging and engagement reflect good faith efforts to address key concerns, needs and policy objectives of stakeholders substantively and practically, they stand little, if any, chance of achieving material progress in “bridging the polarities.” It was pointed out that several key stakeholders are now in the position that they are increasingly unable to advance their agendas but can block the agendas of their adversaries and on reflection, might view this as reason to consider engagement subject to appropriate incentives.

Colorado is now poised under a national spotlight to test the viability of establishing a process for good-faith stakeholder engagement to address a threshold issue for securing a social license to operate: local versus state control of shale gas development. The current focal point is the diverse task force recently appointed by Governor Hickenlooper to provide recommendations for legislative action which can serve as a workable solution to the current conflict.

Based on the results of the Center’s Roundtable summarized above, three essential ingredients for success of this endeavor will be: enlightened leadership, commitment of key stakeholders to “bridge the polarities” by focusing on substantive concerns and mutually reasonable compromises, and willingness of decision-makers to reach out as deemed useful to trusted, experienced thought leaders for non-partisan, practical advice, and to facilitate open discussion and relationship building.



### **Robert M. Hallman**

Robert M. Hallman, who became a Senior Fellow of the Center in July, has over 30 years of experience in energy and environmental policy and legal matters. Most recently Mr. Hallman served as Deputy Secretary for Energy and the Environment for New York State Governor Andrew Cuomo. Immediately prior to joining Governor Cuomo, he directed the energy and environmental practice at the law firm of Cahill, Gordon & Reindel, and served as Chair of the Board of the non-partisan New York League of Conservation Voters.

## Intermountain Oil and Gas BMP Project

The BMP Project continues to expand its resources to provide information on the issues, impacts, and best practices to protect communities and the environment during oil and gas development.

Kathryn Mutz ('95) directs the project in conjunction with Matt Samelson ('11). Additional part-time staff during the year included recent graduates, Kate Toan (LLM '13), Daniel Cordalis ('11), Getches Fellow Julia Guarino ('13), and Matt Sura ('11), CU law students Chloe Bourne, Matt Holleb, Ethan Larson, Jon Nealer, and Ben Petersen, Vermont law student Shaula Eakins, and undergraduates Mikhael Gustin and Erica Jacobs. The project staff works in partnership with colleagues from CU and the Environmentally Friendly Drilling group ([efdsystems.org/index.php/alliance/](http://efdsystems.org/index.php/alliance/)). It is funded with grants from the U.S. Department of Energy, through the Research Partnership to Secure Energy for America, the National Science Foundation, through the Air, Water, Gas Sustainability Research Network, and small grants from the CU Outreach program and the Rocky Mountain Mineral Law Foundation.

Project staff have updated existing website information, added webpages on Water Quantity ([oilandgasbmps.org/resources/water\\_quantity.php](http://oilandgasbmps.org/resources/water_quantity.php)), Compliance issues (web address coming soon), and Public Health (web address coming soon), and continue to add materials to the searchable BMP database and searchable bibliography.

Matt Samelson and his crew are also expanding the comparative law database containing statutes and regulations pertaining to water quality, water quantity, and air quality issues related to oil and gas activities. Hosted by Temple University's Public Health Law Research project (LawAtlas), ([lawatlas.org/topics#.U\\_JAN1bxWLO](http://lawatlas.org/topics#.U_JAN1bxWLO)) the water quality dataset was launched in December 2013; the water quantity dataset in August 2014 and the air quality dataset in fall 2014.

Outreach efforts of the project include preparing a Landowners' Guide to Oil and Gas Development in Colorado and a Handbook for Source Water Protection (in progress); presentations to professional groups and at regional and national meetings (e.g., Rocky Mountain EH&S Peer Group, Groundwater Protection Council/National Rural Water Association, and CH4 Connections); and participation in the 2014 Martz Summer Conference.

## Energy Innovation Initiative

The Energy Innovation Initiative is launching its fourth year with a program of events that highlight important issues across the rapidly changing energy landscape. In July 2014, the Initiative transitioned from the Silicon Flatirons Center for Law, Technology and Entrepreneurship to the Getches Wilkinson Center.

We kicked off our fall 2014 programming with a very successful conference on Disruptive Innovation in Electricity, Telecommunications and the Internet, during which Professor William Boyd moderated a thought-provoking panel on the potential for the rise in distributed energy resources to act as a disruptive threat to prevailing regulatory and business models in the electric power sector.

On October 30th, we will host the 7th Annual Energy Innovation Schultz Lecture. This year, the Lecture will be delivered by James Burke, President & CEO of High Sierra Energy.

For this academic year, the Initiative will continue to focus on three key sets of issues:

- Energy innovation in a carbon constrained world;
- Unconventional oil and gas revolution, particularly issues of community acceptance and efforts to reduce environmental impacts; and
- Grid innovation and the ongoing effort to accommodate increasing amounts of renewables and distributed energy resources.

The Initiative also continues to support and participate in ongoing research on state public utility commissions, and cybersecurity and cloud computing in the energy sector. This research benefits from the Initiative's valuable and ongoing partnerships with NREL, JISEA, CU-Cleantech, and the Renewable and Sustainable Energy Institute (RASEI).



# Western Water Policy Program

The heart of the Western Water Policy Program (WWPP) remains our focus on the Colorado River, through our Colorado River Governance Initiative (CRGI). Many of the activities of the CRGI have been focused on declining levels of reservoir storage, with Lake Mead recently reaching its lowest level on record (since its initial filling in the 1930s). Specifically, water levels now hover around 1080' above sea level, dangerously close to the 1075' threshold that triggers shortages to Lower Basin users in Arizona, Nevada, and Mexico. This looming development is no surprise to CRGI researchers—our 2010 report characterized the probability of curtailments by 2026 as a “virtual certainty,” even though Colorado River users we surveyed had placed this probability at less than 19%. Not surprisingly, this possibility is now garnering tremendous media attention, with CRGI (and WWPP) Director Doug Kenney having recently been quoted in many regional and national publications (e.g., Newsweek) and on national TV (MSNBC). It has taken a while, but the inherent unsustainability of current management practices is finally being acknowledged, and CRGI remains committed to helping identify pathways forward.

Our recent publication on “Research Needs in the Colorado River Basin” ([waterpolicy.info/docs/Research\\_Needs\\_in\\_the\\_Colorado\\_River\\_Basin\\_CRGI\\_2014.pdf](http://waterpolicy.info/docs/Research_Needs_in_the_Colorado_River_Basin_CRGI_2014.pdf)) identifies a host of areas where we hope to focus in future projects should funding become available.

Other areas where CRGI remains active include our work on the impediments (or “disincentives”) to urban water conservation. As foreshadowed in our last newsletter, this work has now been published:

Kenney, Douglas S. 2014. Understanding Utility Disincentives to Water Conservation as a Means of Adapting to Climate Change Pressures. *Journal - American Water Works Association*, 106(1):36-46, January. [wwa.colorado.edu/publications/pdfs/2014.01.pdf](http://wwa.colorado.edu/publications/pdfs/2014.01.pdf)

This paper, done with support from CU's Western Water Assessment, subsequently led to our hosting of a workshop in March 2014 on water utility finance managers convened by Ceres and the Alliance for Water Efficiency. Reforming the financial model of water utilities to eliminate the “throughput incentive”—the tying of utility revenues to the volume of water sold—is now emerging as an active area of research and experimentation nationally.

Finally, another area where the WWPP has been active recently is western oil and gas development, which in this era often involves hydraulic fracturing (or “fracking”). The 2014 Martz Summer Conference explored potential impacts to water and air resources associated with the practice, focusing on the ability of the evolving

regulatory framework to deal with the technical challenges and frenetic pace of development. Over 180 participants assembled in the Law School over 2 days in June to tackle this vast and timely topic. Moving forward, the WWPP will continue a focus on Colorado River work. In one initiative, we have recently assembled a group of prominent Colorado River scholars in the basin to jointly highlight salient “hard truths” about the basin’s supply/demand imbalance, and to encourage public policy toward sustainable solutions. In another, we are investigating what further declines in Lake Mead would mean for water deliveries, hydropower generation, and recreation opportunities. Additionally, we are compiling information about the water’s economic value among uses and regions, all with an eye toward identifying opportunities for infusing market incentives into management practices. Our Colorado-focused work is evolving, but will retain our longstanding interest on legal impediments to efficient water transfers, and will review how Colorado’s first Water Plan intends to protect public interests in water.



Lake Mead bathtub rings

**The Western Water Policy Program continues to evolve, with recent projects focused on sustainable management of the Colorado River, water conservation and transfers, tribal water management, and oil and gas development.**





## Audrey Huang

Audrey Huang joins Colorado Law as an associate clinical professor, directing the Getches-Green Natural Resources, Energy, and Environmental Law Clinic.

She comes to Colorado Law from the University of California, Irvine School of Law where she was its inaugural clinical teaching fellow. Prior to entering academia, Huang practiced in the area of natural resources and environmental law for over ten years in California. She represented clients in both litigation and regulatory compliance and advocacy matters.

Huang earned her JD from the University of Southern California, School of Law, where she was a member of the board of the Hale Moot Court Honors Program. She graduated from The Johns Hopkins University with a BA in International Studies.



## Sharon Jacobs

Sharon Jacobs' primary research interests lie at the intersection of administrative, energy, and environmental law. Joining Colorado Law in fall 2014 as an associate professor, her scholarship to date has examined unconventional regulatory strategies in areas such as electricity demand, resource protection and pollution control. Her current research focuses on creative regulatory responses to shifts in energy markets, including the rise of distributed generation.

For the past two years, Jacobs has been a Climenko Fellow and Lecturer on Law at Harvard Law School where she taught Legal Research and Writing as well as an upper-level course on the Energy-Water Nexus.

Before entering academia, Jacobs practiced at Covington & Burling LLP in Washington, D.C., where she divided her time between the energy and environmental regulatory groups and the general litigation group.

Jacobs earned her JD, cum laude, from Harvard Law School, where she served as Executive Articles Editor of the Harvard Law and Policy Review. A former professional cellist, Jacobs also holds a bachelor's degree from the Cleveland Institute of Music and a master's degree from The Juilliard School, both in music performance.



## Jacquelyn Amour Jampolsky

Jacquelyn Amour Jampolsky is currently serving as the David H. Getches American Indian and Natural Resources Law Fellow for the Getches-Wilkinson Center for Natural Resources, Energy, and the Environment at the University of Colorado, Boulder.

In May of 2014, Jacquelyn was the first graduate to receive a simultaneous JD and PhD degree from the University of Colorado, Boulder, from the Law School and the Department of Environmental Studies. Jacquelyn's interdisciplinary research looks at the intersection between property, place, and power to better advocate towards social and environmental justice for Native peoples and other minority groups.

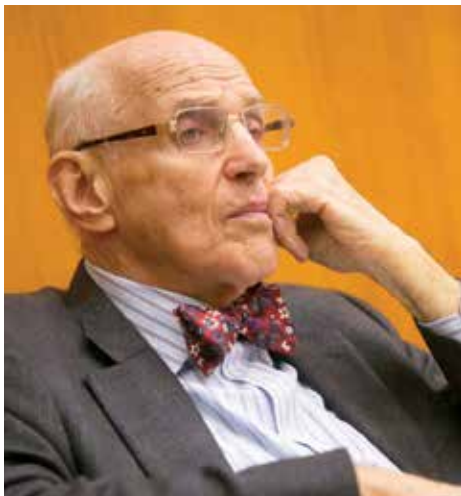
In addition to her scholarship, Jacquelyn has more than four years of traditional legal experience. She currently provides pro-bono legal advocacy work in her position as the Getches Fellow, and recently finished collaborating on an Amicus brief regarding American Indian religious freedoms in front of the 9th Circuit.

## Joseph Sax

Joseph L. Sax, a legal scholar who helped shape environmental law in the United States and who began his teaching career at Colorado Law, died in March at his home in San Francisco. He was 78.

Born and raised in Chicago, Sax earned a law degree in 1959 from the University of Chicago Law School. After a few years in private practice and at the Department of Justice, he began teaching, first with the University of Colorado in 1962 and then at the University of Michigan in 1965. He joined the University of California, Berkeley School of Law in 1986.

Sax was involved in environmental and conservation law from early in his career, working with the Sierra Club in Colorado, drafting Michigan's environmental law (known as the "Sax Act"), and working on a variety of water resource cases in California. It was while he was teaching law students at the University of Colorado that he realized that there was no satisfactory theory accounting for the public interest in natural resources law. Sax established the doctrine that natural resources are a public trust requiring protection, and that doctrine went on to fuel the environmental movement for decades to come.



Joseph Sax

## Environmental Law Review

The *Colorado Natural Resources, Energy & Environmental Law Review* (ELR), formerly the *Colorado Journal on International Environmental Law & Policy* (CJIELP), published its most recent issue, Volume 25 Issue 2, in June 2014. ELR published articles focusing on the interplay between property and tort issues as they apply in horizontal drilling, and the growth and development of international law regulating the relationship between indigenous peoples and states in offshore oil development.

Additionally, the journal published student notes on topics including shark finning, domestic responsibilities to environmental migrants, and ballot initiatives concerning wildlife. ELR is looking forward to a strong year with the incoming Volume 26 executive board and staff writers.

If you are an alum of ELR or CJIELP, or would like to learn more about publishing opportunities with the journal, please contact us at [envtl.law.review@colorado.edu](mailto:envtl.law.review@colorado.edu).

## Environmental Law Society

ELS reprised its Welcome to CU Hike up Green Mountain this year during orientation. This hike is a great way to meet new and old members and get acquainted with Boulder's beautiful outdoors. The Board is planning a mix of events and projects for the year, and we love to see former ELS members and interested community members join us for fund raising events, service projects, and our outdoor gatherings. We anticipate hosting several hikes in the fall and a stream cleanup in both the fall and spring to get our members out of the library and into the community and outdoors. ELS will also host fund raising events to generate

## Native American Law Students Association

The Native American Law Students Association (NALSA) is looking forward to a fun-filled 2014-2015! The year will begin with our Welcome Potluck at the home of Professor Carla Fredericks followed closely by the American Indian Law Program's September 12 conference on Tribal Sovereign Immunity After Bay Mills. We plan to introduce our members to some local practitioners of Indian law during a lunch at the Native American Rights Fund and will celebrate Native American Heritage Month with our annual Harvest Feast in late November. In the spring, we hope to host an Indian law career panel featuring members of our Advisory Team, send participants to the National NALSA Moot Court Competition at the University of Arizona, and head to Flagstaff for the American Bar Association's Indian Law Conference. Look for these events and more in addition to our general meetings, lunch speakers, and social activities throughout the year. If you would like additional information, please contact us at [culawnal-sa@gmail.com](mailto:culawnal-sa@gmail.com).

fellowship funds for students interested in unpaid environmental internships and to cover travel expenses to the Public Interest Environmental Law Conference (PIELC) in Eugene, OR.

Stay up to date with ELS by joining our Face Book page (CU Environmental Law Society) or contacting our Alumni and Community Outreach Liaison, Ariel Williams, at [ariel.e.williams@colorado.edu](mailto:ariel.e.williams@colorado.edu).

## RECENT PUBLICATIONS

### WILLIAM BOYD

*Public Utility and the Low Carbon Future*, 61 UCLA L. Rev. 1614 (2014)

*More Food, More Forests, Fewer Emissions, Better Livelihoods: Linking REDD+, Sustainable Supply Chains, and Domestic Policies in Brazil, Indochina, and Columbia*. 4 CARBON MANAGEMENT 639 (2013) (with D. Nepstad, et. al.).

Responding to Climate Change and the Global Land Crisis: REDD+, Market Transformation, and Low-Emissions Rural Development, 368 Phil. Trans. R. Soc. B 20120167 (2013) (with D. Nepstad, C. Stickler, T. Bezerra, and A. Azevedo).

Natural Gas and the Transformation of the U.S. Energy Sector: Electricity, Joint Institute for Strategic Energy Analysis, NREL/TP-6A50-55538, 1-240 (NREL 2012) (with J. Logan, G. Heath, E. Paranhos, H. Carlson, K., and J. Macknick).

*Genealogies of Risk: Searching for Safety, 1930s-1970s*, 39 ECOLOGY LAW QUARTERLY 895 (2012).

*Law, Environment, and the Non-Dismal Social Sciences*, 8 ANNUAL REVIEW OF LAW & SOCIAL SCIENCE 183 (2012) (with Douglas A. Kysar & Jeffrey J. Rachlinski).

*Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance*, 37 ECOLOGY LAW QUARTERLY 843 (2010), selected for publication in 43 LAND USE & ENVIRONMENTAL LAW REVIEW 295 (2012).

### KRISTEN CARPENTER

*The Jurisgenerative Moment in Indigenous Human Rights*, 102 CALIFORNIA LAW REVIEW (with A. Riley) (forthcoming 2014).

THE INDIAN CIVIL RIGHTS ACT AT FORTY, (UCLA American Indian Studies Center Publications) (with M. Fletcher and A. Riley, co-eds.) (2012).

### JULIA GUARINO

Julie Nania & Julia Guarino, *Restoring Sacred Waters: A Guide to Protecting Tribal Non-Consumptive Water Uses in the Colorado River Basin* (2014).

Julia Guarino, *Tribal Advocacy and the Art of Dam Removal: The Lower Elwha Klallam and the Elwha Dams*, 2 AMERICAN INDIAN LAW JOURNAL 115 (2013).

### LAKSHMAN GURUSWAMY

*Development and Dissemination of Clean Cookstoves: A Model Law for Developing Countries*, 24 COLORADO NATURAL RESOURCES, ENERGY & ENVIRONMENTAL LAW REVIEW 319 (2013).

### SHARON JACOBS

*Bypassing Federalism and the Administrative Law of Negawatts*, 100 Iowa L. Rev. (Upcoming) (2015).

*The Administrative State's Passive Virtues*, 66 Admin. L. Rev. (Upcoming) (2014).

### DOUGLAS KENNEY

Douglas et al. 2014. *Research Needs in the Colorado River Basin: A Summary of Policy-Related Topics to Explore Further in Support of Solution-Oriented Decision-Making*. Boulder: Colorado River Governance Initiative; Getches-Wilkinson Center for Natural Resources, Energy and the Environment. June.

Kenney, Douglas S. 2014. Understanding Utility Disincentives to Water Conservation as a Means of Adapting to Climate Change Pressures. *Journal—American Water Works Association*, 106(1):36-46, January.

*Cross-Boundary Water Transfers in the Colorado River Basin: A Review of Efforts and Issues Association with Marketing Water Across State Lines or Reservation Boundaries*, COLORADO RIVER GOVERNANCE INITIATIVE (2013).

*The "Upper Basin Voluntary Demand Cap" as a Means of Mitigating Legal Uncertainty in the Colorado River Basin: Modeling Results*, COLORADO RIVER GOVERNANCE INITIATIVE (2013).

### SARAH KRAKOFF

*Parenting the Planet* (Upcoming 2015)

*Sustainability and Justice*, in *Rethinking Sustainability to Meet the Climate Change Challenge* (ELI, forthcoming 2015).

*Law, Violence, and the Neurotic Structure of American Indian Law*, forthcoming Wake Forest L. Rev (2014)

*Constitutional Concern, Membership, and Race*, forthcoming Florida International Law Review (2014)

### SARAH KRAKOFF (CONT'D)

*Sustainability and Justice* in ELI News & Analysis, 2013

(with Jon-Daniel Lavallee), *Natural Resource Development and Indigenous Peoples*, in CLIMATE CHANGE AND INDIGENOUS PEOPLES: THE SEARCH FOR LEGAL REMEDIES 199 (Randall S. Abate ed., 2013).

*Settler Colonialism and Reclamation: Where American Indian Law and Natural Resources Law Meet*, 24 COLORADO NATURAL RESOURCES, ENERGY & ENVIRONMENTAL LAW REVIEW 261 (2013)

### MARK SQUILLACE

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

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

*Water Transfers for a Changing Climate*, 53 NATURAL RESOURCES JOURNAL 12-02 (2013).

*The Tragic Story of the Federal Coal Leasing Program*, 27 NATURAL RESOURCES & ENVIRONMENT No. 3 (Winter, 2013).

*Accounting for Water Rights in the Western United States*, in INTERNATIONAL WATER ACCOUNTING: EFFECTIVE MANAGEMENT OF A SCARCE RESOURCE (2012)

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

### CHARLES WILKINSON

*Heeding the Clarion Call for Sustainable, Spiritual Western Landscapes: Will the People Be Granted a New Forest Service?*, 33 PUBLIC LAND & RESOURCES LAW REVIEW 1 (2012) (with Daniel Cordalis).

*Cases and Materials on Federal Indian Law* (6th ed. 2011) (with David H. Getches, Robert A. Williams, Jr. & Matthew L. M. Fletcher).

*The People Are Dancing Again: The History of the Siletz Tribe of Western Oregon* (2010).



## RECENT EVENTS



### The Wilderness Act at 50

#### A gathering hosted by the Getches Wilkinson Center and The Wilderness Society

September 4-5, 2014

On September 3rd, 2014, the National Wilderness Preservation System—established and protected by the Wilderness Act of 1964—celebrated its 50th anniversary. On September 4th and 5th, the Getches-Wilkinson Center and The Wilderness Society convened a gathering to celebrate Wilderness—“ornery old wilderness, scratchy, sweaty, and distant, but sacred every step of the way”—and to commemorate the great law so central to its protection.

This was no ordinary conference, full of dry presentations or heated policy debates. Instead, this was a full-throated love song to wild country. We brought together some of the most inspiring, insightful, and compelling Wilderness luminaries: writers, storytellers, activists, historians, educators, students, photographers, and poets, and were joined by a large number of Wilderness admirers from the public. The gathering featured three prominent writers on Wilderness as keynote speakers: Rick Bass, Bill deBuys and William Kittredge, as well as renowned landscape photographer John Fielder. We heard from some of the early activists who helped to found the Wilderness movement, and from some of the young people who will carry it forward.

Our goal was to tell the story of the Wilderness movement over the course of the last 50 years, to rearticulate the ethos of Wilderness in light of that history, and to take a short moment to reflect on and appreciate the progress that has been made. In the end, we were left with a fresh appreciation for the Wilderness and the great law enacted to protect it, and a renewed determination to continue to work to preserve and enhance one of our most precious assets.

#### Lecture video and content:

[lawweb.colorado.edu/events/mediaDetails.jsp?id=5647](http://lawweb.colorado.edu/events/mediaDetails.jsp?id=5647)

### Understanding Disruptive Innovation: The Cases of Internet, Telecom, and Electricity

September 11, 2014

Over the last thirty years, technological change has accelerated at an increasing rate, threatening established business models and upending whole sectors of the economy. Professor William Boyd moderated a thought-provoking panel on the potential for the rise in distributed energy resources to act as a disruptive threat to prevailing regulatory and business models in the electric power sector.

#### Lecture video and content:

[lawweb.colorado.edu/events/mediaDetails.jsp?id=5629](http://lawweb.colorado.edu/events/mediaDetails.jsp?id=5629)

### 35th Annual Clyde Martz Summer Conference

#### Water and Air Quality Issues in Oil and Gas Development: The Evolving Framework of Regulation and Management

June 5-6, 2014

Technological advances for extracting oil and gas from shale deposits have ushered in a new era of energy development in key resource-rich pockets throughout the US. In this event, we reviewed the ongoing efforts of governments and industry to develop the regulatory and management practices necessary to protect water and air resources, drawing on the latest scientific research to tackle areas of uncertainty and to inform future action.

#### Lecture video and content:

[colorado.edu/law/research/getches-wilkinson-center/gwc-events/gwc-past-events](http://colorado.edu/law/research/getches-wilkinson-center/gwc-events/gwc-past-events)

### Inaugural Getches-Wilkinson Center Distinguished Lecture

#### Featuring: Bruce Babbitt

March 17, 2014

On Monday, March 17, 2014 former Governor and Interior Secretary Bruce Babbitt delivered the inaugural Getches-Wilkinson Center Distinguished Lecture. Governor Babbitt addressed the role of oil and gas development on public lands in Colorado, in the context of competing land uses such as wildlife habitat and wilderness protection.

#### Lecture video and content:

[lawweb.colorado.edu/events/mediaDetails.jsp?id=5438](http://lawweb.colorado.edu/events/mediaDetails.jsp?id=5438)

### 2014 Martz Winter Symposium

#### Natural Resource Industries and the Sustainability Challenge

February 27-28, 2014

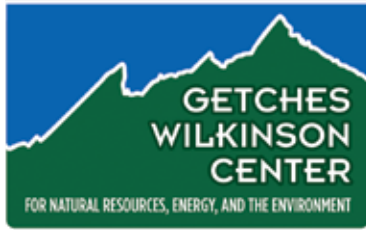
For more than two decades, sustainability has gained currency as a broad organizing principle for efforts to develop and use energy, natural resources, and the environment in ways that allow society to meet its needs without compromising the ability of future generations to meet their needs. More recently, sustainability has been embraced by businesses across multiple sectors as part of a broader movement of corporate social responsibility. Hardly a day goes by without news of another corporate initiative on sustainability. Much of the enthusiasm for sustainability in the business community has been centered in “new economy” sectors and retailers. Much of it has likewise been motivated by the realization that companies can actually save money by embracing more sustainable practices.

In the traditional natural resources industries, there is an increasing recognition of the considerable challenges facing efforts to operationalize this broad concept in the context of resource extraction and development. In the long run, the promise of sustainability will depend on the natural resource industries—those that provide energy, water, fiber, and raw materials for a growing population—translating this concept into action.

The symposium discussed the idea of sustainability and how it is taking shape in particular places and sectors; rigorously explored current efforts to re-organize certain business practices under the rubric of sustainability; and endeavored to identify practical, meaningful actions to deepen ongoing efforts to promote sustainability.

#### Lecture video and content:

[lawweb.colorado.edu/events/mediaDetails.jsp?id=5318](http://lawweb.colorado.edu/events/mediaDetails.jsp?id=5318)



Nonprofit  
U.S. Postage Paid  
Boulder, CO  
Permit No. 156

Getches Wilkinson Center  
University of Colorado Law School  
2450 Kittredge Loop Road, Room 322  
Boulder, CO 80309

**P** 303.492.1286  
**F** 303.492.1297  
**E** [gwc@colorado.edu](mailto:gwc@colorado.edu)

---

## UPCOMING EVENTS

### **7th Annual Energy Innovation Schultz Lecture**

**James Burke**  
**President and Chief Executive Officer**  
**High Sierra Energy**

**October 30, 2014, 5:30 p.m.**

Wolf Law Building  
University of Colorado Law School  
Boulder, CO

This year the Lecture will be delivered by James Burke, President and CEO of High Sierra Energy. High Sierra Energy is a leading gatherer, transporter and marketer of crude oil and NGLs (Natural Gas Liquids) and a growing provider of oilfield water and wastewater handling and disposal services. The lecture will cover the "Water-Energy Nexus," focusing on the increasing importance of water and wastewater handling and disposal for unconventional oil and gas operations.

**For more information and to register:**  
[colorado.edu/law/research/gwc](http://colorado.edu/law/research/gwc)

### **Second Annual Martz Winter Symposium**

**Coming February 2015**



---

Serving the people of the American West, the nation, and the world through creative, interdisciplinary research; bold, inclusive teaching; and innovative problem-solving; in order to further true sustainability for our lands, waters, and environment.

[colorado.edu/law/gwc](http://colorado.edu/law/gwc)