

History for the Future: Possibilities of Using History to Shape Resilience in Colorado's  
Headwaters Communities

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Before diving into my paper I would like to open with a short statement about why I am here today and why I'm taking the approach I am with my dissertation. Patricia Nelson Limerick, chair of the board of the Center of the American West at the University of Colorado, professor of history and PhD from Harvard, all in all a very prominent and respected scholar, had some interesting comments on the behavior of academics. She says,

I think the future of academic history may be going off a little bit of a cliff. The regular academic history thing, where you just do your independent, individualistic research project and write it up in jargonized, theoretical language and have a review by other historians (and sometimes literally there are somewhere short of one hundred people who actually read a professor's stuff), is really sad. That is a melancholy situation, and most graduate training programs are replicating that. I'd like to see a lot more involvement with the public and a lot more clarity of language. A willingness to pay attention to what is happening outside the University. I love the profession of history, and I hope that our work shows some of the promise and possibility of the future practice of history.<sup>1</sup>

I bring up this quote from Patricia Limerick because it accurately reflects my desire in my own dissertation. My dissertation looks at the histories of resilience in Colorado's headwaters communities and this paper focuses on how history may or may not be useful in framing and engaging in discussions of resilience. So I go forth in this paper with a very self-conscious and critical awareness of the shortcomings of traditional academic historical research and hope to engage you all in a conversation about how we can work together to create an informed and interdisciplinary approach to addressing issues of resilience in our communities. In order to do so I will first define resilience, discuss how we may in fact be in a favorable position in history to create our own definitions for and

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<sup>1</sup> Patricia Nelson Limerick, "Patricia Nelson Limerick: going Toe-to-Toe with Western Myths," in *Voices of the American West*, ed. Corinne Platte and Meredith Ogilby (Golden, CO: Fulcrum Publishing, 2009), 30.

meanings of the west and then introduce some of the obstacles standing in the way of resilience efforts.

In order to insure clarity of this discussion I'd like to define resilience. Resilience as a concept has long been used in the study of ecology and has recently been applied to social communities as well. W. Neil Adger defines social resilience as the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change.<sup>2</sup> In ecological resilience the functioning, or the dynamics, of the system rather than its stability is the primary concern. Adger clearly draws a link between social and ecological resilience, particularly in cases where communities are dependent on environmental resources for their livelihoods. Brian Walker and David Salt argue that traditional resource management, conservation and sustainability do not give us the tools needed to sufficiently adapt to our changing world. Traditional approaches, they argue, are modeled on average conditions and expectations of incremental growth, ignore major disturbances, and seek to optimize some components of the system in isolation of others. The business as usual practice of increasing efficiency and optimizing performance within the human and ecological systems can only take us so far.<sup>3</sup> And in a state where the new normal means dealing with increased variability, adaptation to change becomes vital.

As social and ecological systems are linked in co-evolutionary relationships, the resilience of social systems is tied—in albeit sometimes ambiguous ways—to the ecological systems on which those social systems depend. Therefore, environmental

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<sup>2</sup> W. Neil Adger, "Social and Ecological Resilience: Are They Related?" *Progress in Human Geography* 24, 3 (2000): 347-364.

<sup>3</sup> Brian Walker and David Salt, *Resilience Thinking: Sustaining Ecosystems and People in a Changing World* (Washington, D.C.: Island Press, 2006), 14.

variability as well as social, economic, and political changes can impact resource dependent communities much like many of Colorado's headwaters communities. Their resilience is dependent on the diversity of the ecosystem as well as the institutional rules that govern the social systems which allow shocks to be absorbed. Regardless of what term you ascribe to, be it resilience or sustainability, I think there are a number of ways in which historical research can help to inform the many discussions we have about how to make our lives and homes healthier. And potentially the time is here for us to open this discussion.

In *Reopening the Frontier* Ed Marston claims that the American West remained fairly unchanged from the time the frontier was declared closed in the 1890s till the energy boom of the 1970s to mid 1980s.<sup>4</sup> The frontier closed because the question of what the West was based on was answered through cattle ranching, irrigated agriculture, mining, milling, and logging. This approach balanced the stability of ranching and irrigated agriculture with the instability of mining and drilling and constructing dams and coal-fired power plants. This lasted until the energy boom of the 1970s to mid-1980s after which the resulting crash reopened the frontier. In the aftermath of the crash, for the first time in the twentieth century, westerners could ask questions about how the west would earn its living, what new values to adopt, who would inherit the emptying communities, would the existing communities recover, would the resurgent Indian nations make new niches or would outsiders come in and push them aside. Mostly, would a different, but still distinctly Western way of life be established? Or would the

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<sup>4</sup> Ed Marston, "A Shattered Region," in *Reopening the Western Frontier*, ed. Ed Marston (Washington, D.C.: Island Press, 1989), 3-6.

West succumb to what Marston calls “just another chunk of homogeneous America, another suburb on a featureless plain--New Jersey with bumps and fissures.”<sup>5</sup>

While we are fairly removed from this period in time, I argue that we are also in a formative moment. Our current economic struggles that plague the whole country along with the demand to make plans to account for the prospect of a growing population in Colorado and a changing climate means we can help shape the new frontier that is the present. As we go about implementing plans and actions to appropriate water in Colorado’s different river basins we should consider what a resilient future in Colorado might look like. However, in order to determine appropriate actions for the present and future, perhaps we can use the past to help inform the discussion.

I would contend that one of the biggest obstacles we must face when considering a resilient west is what Charles Wilkinson calls the “Lords of Yesterday.” These lords are laws, policies, and ideas, not people, that arose from a specific historical context and need that allowed the westward expansion and development of our country in the 19<sup>th</sup> and early 20<sup>th</sup> centuries.<sup>6</sup> However, perhaps it is time to find new replacements for these lords given changes in the 20<sup>th</sup> and 21<sup>st</sup> centuries. The Lords of Yesterday include the Hardrock Mining Law of 1872, public rangeland grazing and timber production on national forests, the development of engineered hydro projects on the west’s waterways and the doctrine of prior appropriation. While some of these lords have been addressed since Wilkinson wrote about them in 1992, such as holistic land management practices and stricter regulations for public lands grazing, others of these lords remain to be

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<sup>5</sup> Marston, “A Shattered Region,” 6.

<sup>6</sup> Charles Wilkinson, *Crossing the Next Meridian: Land, Water, and the Future of the West* (Washington, D.C.: Island Press, 1992).

addressed. Today's presentations and attendees offer even more examples of people trying to get past some of these Lords of Yesterday.

Probably the most interesting issue to consider given the nature of this conference is the doctrine of prior appropriation. How does one—and should one—try to get past the water law that has been integral to our development? While prior appropriation is deeply entrenched in our way of life in so many aspects, it has also relinquished its grip in other ways. The recognition of traditional acequia farming techniques and culture in the San Luis Valley offers one poignant example of how a group of people fought to get their historical use recognized in a court of law. The acequias are community-operated gravity-driven irrigation systems developed by the Spanish that not only provide vital water sources for local agriculture, but the acequia agroecosystems promote soil conservation and soil formation, provide terrestrial wildlife habitat and movement corridors, protect water quality and fish habitat, promote the conservation of domesticated heirloom crops, and encourage the maintenance of a strong land and water ethic and sense of place.<sup>7</sup> Colorado's house bill 1233-09 was passed in 2009 and recognizes the acequias as one of the oldest forms of self-governance and as such offers them the protection of other water users. This allows for recognition of equity and fairness as important qualities in water use. However there is concern that the house bill did not go far enough in recognizing traditional uses of acequia water and that acequia law and prior appropriation are still incompatible and more reform is needed. That said,

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<sup>7</sup> See Devon Peña, *Chicano Culture, Ecology, Politics: Subversive Kin* (Tucson: University Arizona Press, 1998); Devon Peña, "Identity, Place and Communities of Resistance," in *Just Sustainabilities: Development in an Unequal World*, ed. Julian Agyeman, Robert D. Bullard, and Bob Evans, 146-167, (Cambridge: MIT Press, 2003); and Devon Peña and Joseph Gallegos, "Nature and Chicanos in Southern Colorado," in *Confronting Environmental Racism: Voices from the Grassroots*, ed. Robert D. Bullard, 141-160, (Boston: South End Press, 1993).

these changes still mark a shift in recognizing locally-controlled water management systems and the need for diversified practices beyond the regime of prior appropriation. Even the "Colorado Water for the 21st Century Act" which created the different river basin boards offers a divergence from the historical management of water in Colorado which is pretty exciting.

Whether you find yourself wishing for a different system of water management or not, a conversation needs to be had that addresses our current and future relationship with water and we need to be aware of potential sources of inertia that can impede change. As growing municipalities continually increase their demands for more water we need to keep in mind that not only is ranching and agriculture a traditional method of economic development in this state, but the new water and soil conservation practices elevate agriculture in this state beyond simply destructive resource extraction practices. We need to find a balance between municipal, recreation, and agricultural needs to name a few.

So how do we address the lords of yesterday? One element is planning to address and protect our ecological, economic, cultural and abstract needs. The kind of community planning utilizing diversified participants has not traditionally been the way of the west in the past. Our historically regional economies dependent on erratic and fast-paced extraction have worked against efforts at community planning. However, examples like this conference and the various river basin water boards across the state give hope that something like diversified community planning might replace the top-down approach of the Lords of Yesterday. We also need to modify or replace the old ideas that led to and supported the Lords of Yesterday with our own new ideas based on individual responsibility which is directly tied to diversified community planning and

reach out to those sources of local place-based knowledge and integrate them into our plans. Also, recognition of the many different and sometimes conflicting identities that occupy the West, Colorado, and even individuals is integral to fostering an inclusive process that is equitable and expedient. Without recognizing the historical factors contributing to the inertia preventing change we cannot hope to make the major changes we need.

I would like to close by sharing a little something from my advisor. He says that complexity and nuance are the foundations of the historian's craft. And I agree with him. Historical context is important when discussing how various events unfold—which is why I agree with Wilkinson in that the roles of the Lords of Yesterday, over a hundred years old, need to be re-evaluated for the 21<sup>st</sup> century. However, I also think that sometimes, academic historians lose the purpose of that rigorous search for complexity and nuance. For me, the purpose is to make the historical research part of the discussion about our lives and futures. I know that my own work is very much in its early stages and I apologize for this paper's one-sidedness where I get most of the benefits through your responses and hopefully the conversation that follow, rather than me bestowing brilliant and ground breaking research to you all. Nonetheless I welcome and encourage feedback about how you might see the uses of historical research to address some of the fundamental questions we face in trying to create a more resilient future for our homes.

## Bibliography

- Adger, W. Neil. "Social and Ecological Resilience: Are They Related?" *Progress in Human Geography* 24, 3 (2000): 347-364.
- Andrews, Richard N.L. *Managing the Environment, Managing Ourselves: A History of American Environmental Policy*. New Haven: Yale University Press, 1999.
- Bullard, Robert D., ed. *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*. San Francisco: Sierra Club Books, 2005.
- . *Unequal Protection: Environmental Justice and Communities of Color*. San Francisco: Sierra Club Books, 1994.
- Cronon, William, George Miles, and Jay Gitlin, eds. *Under an Open Sky: Rethinking America's Western Past*. New York: W.W. Norton & Co., 1992.
- Deverell, William, ed. *A Companion to the American West*. Malden, MA: Blackwell Publishing Ltd, 2004.
- Johnson, Michael L. *New Westers: The West in Contemporary American Culture*. Lawrence: University Press of Kansas, 1996.
- Limerick, Patricia Nelson, Clyde A. Milner II, and Charles E. Rankin, eds. *Trails: Toward A New Western History*. Lawrence: University Press of Kansas, 1991.
- Malone, Michael P., ed. *Historians and the American West*. Lincoln: University of Nebraska Press, 1983.
- Marston, Ed, ed. *Reopening the Western Frontier*. Washington, D.C.: Island Press, 1989.
- Milner, Clyde A. II, ed. *A New Significance: Re-envisioning the History of the American West*. New York: Oxford University Press, 1996.
- Nash, Gerald D. *Creating the West: Historical Interpretations 1890-1990*. Albuquerque: University of New Mexico Press, 1991.
- Nelson, Donald R., W. Neil Adger, and Katrina Brown. "Adaptation to Environmental Change: Contributions of a Resilience Framework." *Annual Review of Environment and Resources* 32 (2007): 395-419.
- Peña, Devon. *Chicano Culture, Ecology, Politics: Subversive Kin*. Tuscon: University Arizona Press, 1998.
- . "Identity, Place and Communities of Resistance." In *Just Sustainabilities: Development in an Unequal World*, edited by Julian Agyeman, Robert D. Bullard, and Bob Evans, 146-167. Cambridge: MIT Press, 2003.
- Peña, Devon and Joseph Gallegos. "Nature and Chicanos in Southern Colorado." In *Confronting Environmental Racism: Voices from the Grassroots*, edited by Robert D. Bullard, 141-160. Boston: South End Press, 1993.
- Platte, Corinne and Meredith Ogilby, eds. *Voices of the American West*. Golden, CO: Fulcrum Publishing, 2009.
- Walker, Brian and David Salt. *Resilience Thinking: Sustaining Ecosystems and People in a Changing World*. Washington, D.C.: Island Press, 2006.

- Wilkinson, Charles. *Crossing the Next Meridian: Land, Water, and the Future of the West* Washington, D.C.: Island Press, 1992.
- . *The American West: A Narrative Bibliography and A Study in Regionalism*. Boulder: University Press of Colorado, 1989.
- , *Fire on the Plateau: Conflict and Endurance in the American Southwest*. Washington, D.C.: Island Press: 1999.
- Worster, Donald. *Rivers of Empire: Water, Aridity, and the Growth of the American West*. New York: Oxford University Press, 1985.
- . *Under Western Skies: Nature and History in the American West*. New York: Oxford University Press, 1992.

Historians have discovered that a type of natural glass - obsidian - formed in places such as the mouth of a volcano as a result of the intense heat of an eruption melting sand - was first used as tips for spears. Archaeologists have even found evidence of man-made glass which dates back to 4000 BC; this took the form of glazes used for coating stone beads. It was not until 1500 BC, however, that the first hollow glass container was made by covering a sand core with a layer of molten glass. A major milestone in the history of glass occurred with the invention of lead crystal glass by the English glass manufacturer George Ravenscroft (1632 - 1683). He attempted to counter the effect of clouding that sometimes occurred in blown glass by introducing lead to the raw materials used in the process. Some historians prefer to divide 19th-century history into relatively small chunks. Thus, 1789-1815 is defined by the French Revolution and Napoleon; 1815-48 forms a period of reaction and adjustment; 1848-71 is dominated by a new round of revolution and the unifications of the German and Italian nations; and 1871-1914, an age of imperialism, is shaped by new kinds of political debate and the pressures that culminated in war. Between 1789 and 1849 Europe dealt with the forces of political revolution and the first impact of the Industrial Revolution. Between 1849 and 1914 a fuller industrial society emerged, including new forms of states and of diplomatic and military alignments.