

1-1-2013

Rio Grande!

Andy McFadden

Follow this and additional works at: <https://digitalcommons.du.edu/wlr>



Part of the [Law Commons](#)

Custom Citation

Andy McFadden, Conference Report, Rio Grande!, 16 U. Denv. Water L. Rev. 461 (2013).

This Conference Report is brought to you for free and open access by the University of Denver Sturm College of Law at Digital Commons @ DU. It has been accepted for inclusion in Water Law Review by an authorized editor of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu, dig-commons@du.edu.

Rio Grande!

solar radiation and promoting snowmelt. As a result, USGS is currently working with the Bureau of Land Management to create dust risk maps.

Reynolds then discussed dust issues in Colorado, where large dust events have occurred more frequently over the past decade. In Colorado, dust moves from southern plateaus, northeast into the mountains. Reynolds identified numerous sources from which this dust may be coming. For instance, regional groundwater withdrawal, overgrazing, and increasing regional aridity may all contribute to the increased dust levels. Reynolds also pointed to Tolani Lake, a dried-up lake in Arizona, as a large contributor of dust. USGS is testing sediment from Colorado snowpack in an attempt to trace the largest contributors of dust in the state.

Reynolds ended his presentation by providing possible solutions to the increasing accumulation of dust on snowpack, such as stabilizing soil and sand dunes with perennial vegetation and maintaining high groundwater levels. Reynolds made clear that any solution is going to take a lot of “will power, knowledge, resources, and collaboration.”

Jenna Anderson

RIO GRANDE!

Steve Vandiver of the Rio Grande Water Conservation District moderated the Sixth General Session of the 2013 Colorado Water Congress Annual Convention, titled “Rio Grande!” The four panelists were Bill Paddock of Carlson, Hammond & Paddock, L.L.C.; Craig Cotton, Colorado Division Engineer from the Rio Grande Division; David Robbins of Hill & Robbins, P.C.; and a special appearance by the Rio Grande Reservoir Chief Engineer from the early 1900s, J.C. Ulrich (performed with a mustache and turn-of-the-century attire by Colorado Supreme Court Justice Gregory J. Hobbs, Jr.).

“Ulrich” took to the stage first, despite exceeding one hundred years of age many years ago, and recited a letter he wrote on October 27, 1905 to the Farmers Union Irrigation Company, which enlisted Ulrich to construct the Rio Grande Reservoir Dam. In the letter, Ulrich dismissed his prior reservations over dam construction and laid out his proposal for a composite structure comprised of dry rubble, clay, and earth. His subsequent letters illuminated his strict attention to detail over every activity related to the dam’s construction. These letters dictated the proper number of tents required for labor crews, the number of axes and axe handles, and the appropriate dimensions and wood type for an engineer’s drafting table. No detail was too minor to garner his attention. Ulrich concluded by expressing his concern over the lackluster quality of the contract laborers in a 1910 letter, but he eventually turned the troublesome contractors into a productive crew, as shown by the successful completion of the Rio Grande Reservoir.

Bill Paddock spoke next, and thoroughly discussed the history of the development of the Rio Grande Reservoir. Starting in the 1880s and 90s, and due to an international conflict between the US and Mexico over use of the Rio Grande, the US placed embargos on reservoir development on federal lands. In 1906, Mexico and the US signed a treaty that resolved many of the issues and lifted the embargos. Subsequent water use conflicts between Colo-

rado, New Mexico, and Texas eventually emerged. The federal government revived the earlier embargos, pressuring the three states to enter into agreement to ensure adequate water allocation along the Rio Grande. Paddock noted that the consequences of these past embargos still affect the region today, as evidenced by the current limited storage capacity along the Rio Grande.

By 1939, Congress approved the Rio Grande Compact, which created a water credit and debt system for the three states, effectively placing a cap on their respective water use. Nevertheless, throughout the 1950s and 60s Colorado failed to meet its statutory obligations by running up a large debt under Compact provisions. In 1966, Texas and New Mexico sued Colorado to enforce the Compact. Under pressure to comply, Colorado began severely curtailing surface water rights in 1968, and with the 1985 spilling of Elephant Butte Reservoir, Colorado eventually absolved its water debt.

Craig Cotton spoke next and explained various parts of the administration of the Compact. The Compact requires delivery of water from two streams in Colorado: the Rio Grande itself, and the Conejos River, which is the Rio Grande's main tributary. Generally, Colorado must deliver twenty-seven to twenty-eight percent of the Rio Grande's 650,000 acre-foot average flow and thirty-eight percent of Conejos's 300,000 acre-foot average flow.

One important and challenging Compact condition requires projecting Colorado water needs each year before those needs actually arise. During periods of low flow, the Compact prioritizes Colorado's projections and reduces Colorado's delivery obligations. During periods of high flow, the Compact caps Colorado's water use near the projected use, and the state's delivery obligation increases. Cotton stated that, at periods of extremely high flow, the Compact requires Colorado to send one hundred percent of the excess water down to New Mexico and Texas. This often aggravates Colorado farmers because the State prohibits them from diverting substantial flows that pass right by their lands. Cotton mentioned that another challenge to Compact administration includes meeting endangered species guidelines. Congress designated certain stretches of the Rio Grande as "critical habitats," which presents the challenging task of retaining specific flows in difficult-to-reach regions.

David Robbins was the last panelist to speak and discussed two current legal issues surrounding groundwater. First, Robbins detailed the new governmental subdistricts of the Rio Grande Water Conservation District. The subdistricts are statutorily created entities tasked with analyzing and replacing flows to regions of low flow along the Rio Grande due to groundwater pumping.

Second, Robbins discussed Texas's pending lawsuit, for which it is seeking a petition for certiorari by the US Supreme Court. Although the legal issue in that case directly involves Texas and New Mexico's well pumping adjacent to the Rio Grande, the lawsuit indirectly implicates Colorado because of its participation in the Rio Grande Compact. Robbins explained that the fundamental conflict arises from differing legal characterizations of groundwater use. Although Colorado law administers surface water and tributary groundwater as part of the same hydrological and legal regime, the Compact and other states treat these two water sources as separate. Texas, in particular, allows for unfettered groundwater pumping, and Robbins suggested that such unrestricted

water use is what instigated the present litigation. Robbins concluded by stressing that, if the Court grants certiorari, Colorado will be ready to defend its water interests.

Andy McFadden

WHAT'S ON OUR PLATE FOR 2013?

Moderator Chris Treese of the Colorado River Water Conservation District introduced this session by describing the importance of planning for the future and considering changes happening throughout Colorado over the next year. This session included discussion of four separate topics: (i) the Colorado River Basin Water Supply and Demand Study; (ii) drought; (iii) Good Samaritan legislation; and (iv) the CWC's Public Trust Special Project.

Colorado River Basin Study

Erin Wilson of the Wilson Water Group first discussed the key findings of the Colorado River Basin Water Supply and Demand Study ("Study"). The Study employed several different demand scenarios to obtain the best possible projection of future water use within the Colorado River Basin. The Study based its various demand scenarios on models such as Paleo-direct natural flow (tree-ring information) and projected climate models accounting for climate change.

Wilson further explained the Study does not institute any decisions itself, but provides the foundation for future decision-making on water infrastructure and supply projects. Wilson described the key indicators for identifying changes in Colorado's water supply in the Colorado River as flows at Lees Ferry and other critical locations, as well as demand signposts. Based on the results and data of the Study, Wilson recommended a number of steps for Colorado to take.

First, Colorado should adopt a signpost approach outside of the modeling industry to respond to indicators in weather and streamflow conditions. For example, water planners can respond to certain set streamflow conditions with carefully planned drought response measures. Next, Colorado must develop methods to accurately represent supply and demand models. Wilson explained the Surface Water Supply Index ("SWSI") is a good model for basin-wide analysis; however, additional models should include cross-basin impacts. Finally, Wilson advocated for Colorado to support continued efforts to conduct water bank programs and desalination projects in the lower Colorado River Basin.

Wilson's discussion set forth the fundamental concepts contained in the Study and presented several key ideas for water managers to consider as steps to address the projected issues facing the future of water supply and demand in Colorado.

Drought

The next panel on drought featured Stacey Chesney of Denver Water, Diane Johnson of the Eagle River Water and Sanitation District ("ERWSD"),