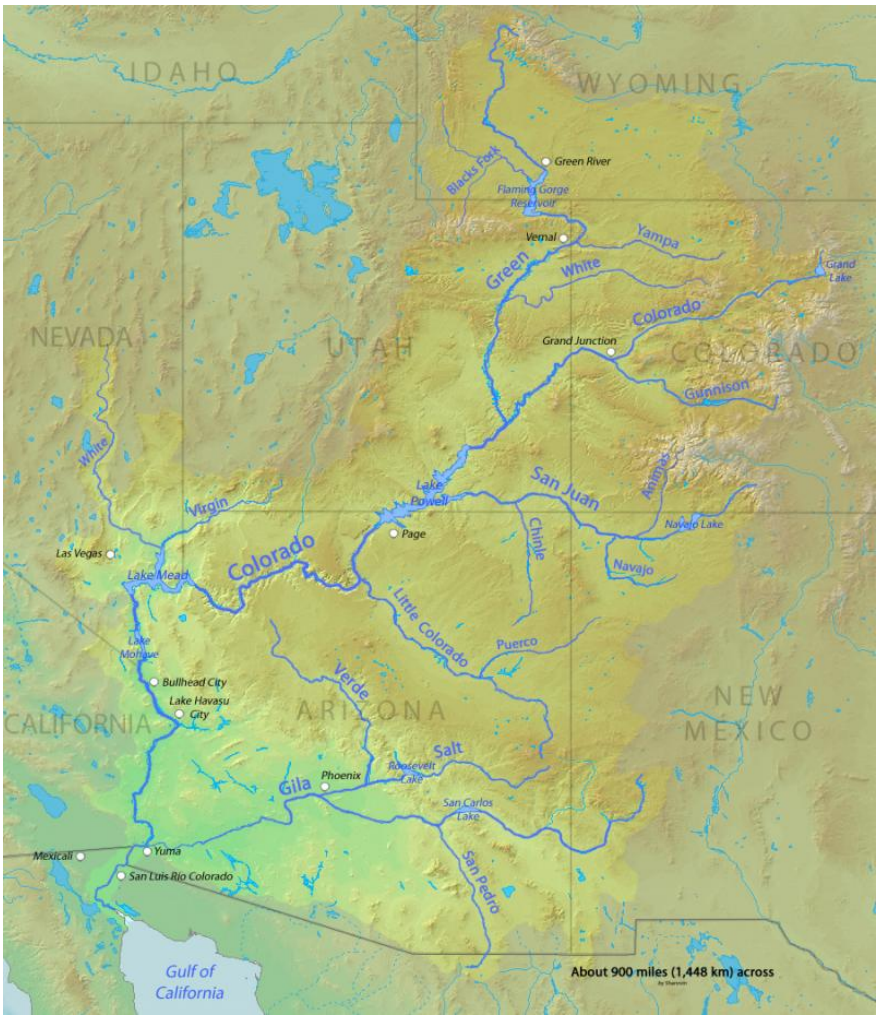
“Citizens of a Watershed”: The Colorado River Compact and the Exigencies of Drought

Lauren Foster and Stacy N. Roberts

Summary

The Colorado River Compact initiated in 1922 has been both a bane and a boon to cities, states, residents, and politicians who have lived along the river and relied on it for survival. When severe drought plagued the American Southwest in the early 2000s, a new leader for water negotiations emerged: Patricia Mulroy. She hailed from Las Vegas—a city with a burgeoning population and title to a very small portion of the Colorado. After bringing together the city’s vying water districts, Mulroy worked with the entire river community and ushered in a new era of cooperation in the face of an uncertain climatic future.

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The Colorado River runs 1,450 miles from its headwaters in Colorado to the Gulf of California. Its watershed spans seven U.S. states and two Mexican states, providing vital water to major metropolitan areas in the American Southwest.

Map by Shannon using public domain DEMIS and USGS Seamless server, "Colorado River Map" , 25 February 2010.

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In 1922, representatives from seven U.S. Western states met to design the first water allocation of an intrastate river. The Colorado River, with headwaters in the state of Colorado, flows 1,450 miles into Mexico and the Gulf of California, serving as the lifeline to southwestern populations. As such, every state along the river had incentive to reach a water allocation agreement. However, negotiations nearly failed and Arizona did not ratify the compact until 1944. The Colorado River Compact divides the total water of the river (determined from flow records to be 15 million acre feet (MAF) (18.5 billion cubic meters)), between an Upper and Lower Basin. The Upper Basin, consisting of Wyoming, Colorado, New Mexico, and Utah, must deliver 7.5 MAF (9.25 billion cubic meters) each year to the Lower Basin, comprised of Arizona, Nevada, and California, under the compact. This volume-based allocation did not account for the high interannual variability of the river or the varied needs of the river's stakeholders, whether urban, rural, tribal, agricultural, recreational, or environmental. Though only four pages in length, the compact formed the foundation for an incredibly complex collection of court decisions, statutes, regulations, and other documents known as the "Law of the River."

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External video. Link: https://youtu.be/p-_oAF2hDU4 The Southern Nevada Water Authority made saving water a priority and a cultural value for the Las Vegas metropolitan area with commercials such as "The Neighbor." (Southern Nevada Water Authority, "The Neighbor," TV Ads, www.changeyourclock.com).

The Southern Nevada Water Authority made saving water a priority and a cultural value for the Las Vegas metropolitan area with commercials such as "The Neighbor." (Southern Nevada Water Authority, "The Neighbor," TV Ads, www.changeyourclock.com).

The "Law's" premises came under harsh scrutiny in the early 2000s as severe drought plagued the American Southwest. Enter: Patricia Mulroy, head of the Southern Nevada Water Authority in Las Vegas. Mulroy spent most of the 1990s bringing together the metropolis's vying water districts to better tackle the issues of water supply and scarcity. In 2001, she secured the city's water banking agreement with Arizona, the first of its kind, in which the city of Las Vegas paid Arizona's Water Banking Authority to purchase water from Arizona's farmers and hold it in underground reserves for the city. When that water was needed in future years Las Vegas would take an equivalent portion out of the Lake Mead reservoir and Arizona could tap its stored underground supply. By circumventing prolonged and costly interstate litigation, Mulroy spearheaded an innovative approach that would soon refigure water relationships throughout the entire Colorado River Basin. In 2007, after three years of negotiations, the Lower Basin States reached an agreement in which three trigger points were set—1075, 1050, and 1025 feet above sea level in Lake Mead—that if reached would force graduated curtailments in water use. The agreement also allowed for water efficiency projects and storage in Lake Mead in order to thwart implementation of the water use restrictions. Such cooperation aimed at spreading water scarcity amongst many to lessen the effects for all.

External video. Link: https://youtu.be/G2dpLCkFPRg Patricia Mulroy explains the centrality of the Colorado River to Las Vegas and applauds the city's residents for their efforts to conserve water. (Southern Nevada Water Authority, "Thanks for Helping", YouTube snwavideo).

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Minute 319 allotted water to restore the desiccated Colorado River Delta in Mexico's Sonoran Desert. Prior, the river ended five miles north of its historic terminus in the Gulf of California, also known as the Sea of Cortez.

Pete McBride, U.S. Geological Survey, "Colorado River Dry Delta" , 12 January 2009.

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Cooperation between metropolitan water districts and states was not the only feat accomplished at the bargaining table, however. Since the 1990s, Mulroy had advocated for the inclusion of Mexico as an equal partner at the water-divvying table, calling the desiccated Colorado River Delta a shame for the entire river community. On 20 November 2012, Mexico joined the U.S. Colorado River community through an agreement known as Minute 319. As the *New York Times* explained: "[...] the two countries will share in both surpluses and water shortage. During drought years in the United States, less water will be sent to Mexico. In exchange, during years of plenty, Mexico will be allowed to store some of its water north of the border." The agreement also provided funding measures for improvements to Mexico's earthquake-damaged water infrastructure as well as water allotments to restore the Colorado River Delta. "The Colorado River, in so many ways, makes us one people," posited U.S. Secretary of the Interior Ken Salazar at the signing of this agreement, "and together we face the risk of reduced supplies in years ahead."

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External video. Link: https://cdnapisec.kaltura.com/p/1770401/sp/177040100/embedIframeJs/uiconf_id/24976591/partner_id/1770401?iframeembed=true&playerId=kaltura_player&entry_id=0_7ucm8rm8. Patricia Mulroy spoke passionately about working together to face an uncertain future regarding water flows in the Colorado River at the Water Scarcity in the West: Past, Present, Future Conference at the University of California, Davis in April 2015. (CCWAS IGERT Annual Workshop, Water Scarcity in the West: Past, Present, Future, University of California, Davis, April 6–7, 2015).

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Secretary Salazar's sentiment was echoed in a speech given by Patricia Mulroy at the University of California, Davis in April 2015. She implored residents and leaders of the Colorado River Basin to view themselves as "citizens of a watershed," explaining that "the answers for tomorrow are not new permanent agreements. They are establishing processes whereby as conditions change, we who have spent a lifetime warring with one another, can find common answers to the problems on the ground as they occur." Members of any watershed would do well to heed such words of wisdom.

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Websites linked in image captions:

- https://commons.wikimedia.org/wiki/Category:Colorado_River#/media/File:Coloradorivermap.jpg
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Lead Author: Stacy N. Roberts is a History PhD student and a U.S. National Science Foundation IGERT Trainee in Climate Change, Water, and Society at the University of California, Davis. Her research focuses on the environmental history of the American South in the late nineteenth and twentieth centuries. This piece, "Citizens of a Watershed", was born out of an interdisciplinary conference hosted by the 2015 Climate Change, Water, and Society IGERT cohort at UC Davis in April 2015.

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