Western Legal History

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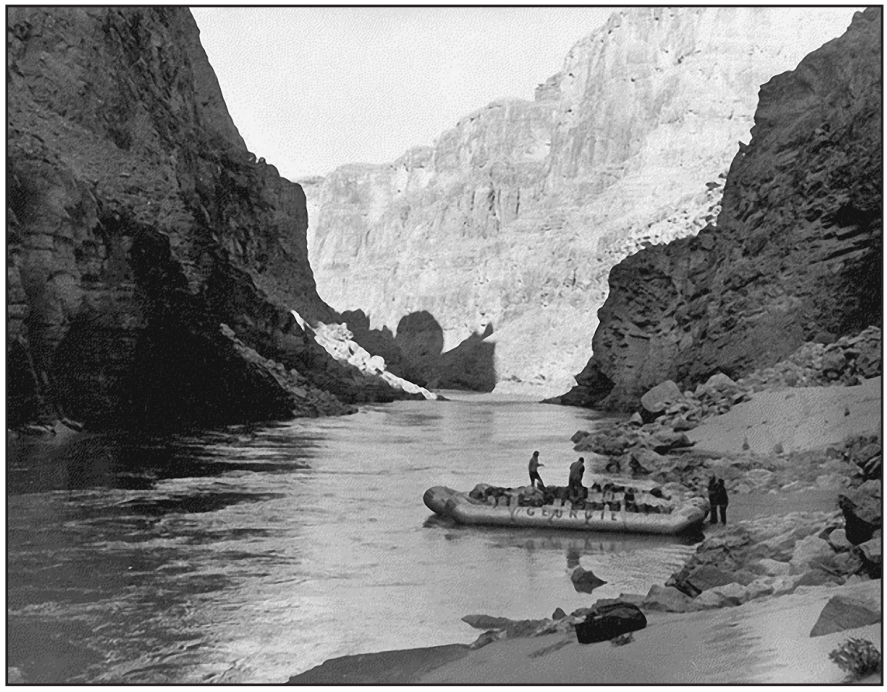

Water

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Western Legal History
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Whether because of prejudice or custom, writers in earlier times often used language considered strange or offensive today. Because Western Legal History publishes articles that present the historical record as accurately as possible, it occasionally publishes quotations containing such language. The publications of such is not to be construed as representing the attitudes of either the authors or Western Legal History.

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VOLUME 33

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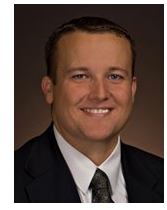
Cover Photo: Georgie White's triple rig in the Inner Gorge, April 1964. White was the first woman to own a commercial river rafting company, Georgie's Royal River Rats, which brought passengers down the Colorado River. Courtesy of Grand Canyon National Park Historic Photo, .

Introduction

"Whiskey is for drinking; water is for fighting about."
- Mark Twain (by attribution)

This introduction will be necessarily brief as the Journal is fortunate indeed to have Rhett Larson as the Guest Editor of this edition. Widely recognized as one of America's best informed and knowledgeable water experts, he is no stranger to the thirst of arid lands for water, having cut his working teeth in the deserts of Jordan, Lebanon, and Israel where he helped develop solar-powered wells in the midst of sectarian conflict. Rhett has assembled a talented group of individuals immersed in Western water issues to provide a description of the various competitors for the limited supply of its lifeblood.

Not to be overlooked, our book review section, with Kevin Hamilton in charge, new to the Journal, but certainly not to reviewing the printed word. This edition is blossoming with titles as varied as a new look at a former President, an athletic contest in the midst of war and dining with a Supreme Court Justice. Chief Judge Emerita Mary Schroeder, someone who dined often with Justice Ginsburg, provides a review of Nina Totenberg's wonderful reflection of her own dinners with the late Justice.



*Rhett B. Larson**

INTRODUCTION: WATER EQUITY AND PRIOR APPROPRIATION IN THE WEST

I am the father of four children. One day, I took them to see a movie at the theater. As we left the movie theater, the youngest yelled "Shotgun!" Calling "Shotgun" is a traditional way of claiming the right to ride in the front seat of the car. The front passenger seat is called "shotgun" in reference to old stagecoach days when the seat next to the stagecoach driver was reserved for a guard holding a shotgun to protect against bandits in the Old West.[1] I'm not sure how the rule evolved that the first person to yell "Shotgun!" claims superior right to the front seat, but I know it predates my childhood and is widely recognized in much of the United States.

After the youngest staked her claim with a shout of "Shotgun!" the oldest calmly stated, "You can't just yell 'Shotgun!' You have to wait until you see the car." As we rounded the corner, the parking lot and our car came into view. The second oldest staked his claim. "Shotgun!" he yelled. The oldest again calmly explained the complexity of a seemingly simple legal regime. She said, "You can't just yell 'Shotgun!' when you see the car. You have to see the car and be standing on the same surface as the car." At that point, she stepped off the curb and onto the blacktop of the parking lot, and stated in a clear voice, "Shotgun." The other two children accepted their inferior claims with due regard for the law as an expert had authoritatively explained it and applied it with clear, dispassionate logic.

Western water law is similar to this parking lot experience. Prior appropriation is a "first-in-time, first-in-right" water allocation regime, similar to calling "Shotgun!" A person who puts a particular quantity of water to beneficial use has a superior claim to that quantity of water over any

*Rhett Larson is the Richard Morrison Professor of Water law, Arizona State University Sandra Day O'Connor College of Law and a senior research fellow with the Kyl Center for Water Policy. His teaching and research focuses on international and domestic water law and policy, and he is the author of Just Add Water (Oxford University Press, 2020).

1. John Boessenecker, SHOTGUNS AND STAGECOACHES: THE BRAVE MEN WHO RODE FOR WELLS FARGO IN THE WILD WEST (St Martin's Press, New York, New York, 2018). p. 7.

subsequent user.[2] When there is not enough water for all, there is a "call on the river" and junior users lose their water supply so that senior users can satisfy their rights.[3] That rule seems as simple to apply as deciding who gets the last box of cereal on the shelf of the grocery store, or the parking spot closest to the entrance, or the front passenger seat of the car—whoever gets there first. However, as my younger children learned from my oldest child regarding the rules of "Shotgun," prior appropriation water rights are deceptively complicated.

The Complexities of a Simple Rule

In a prior appropriation regime, it is not enough to get to the water first. Water right holders must put the water to beneficial use.[4] If right holders fail to use water for a particular period, the water right holder may forfeit their right. The right holder, however, may claim a defense against forfeiture, such as an inability to use water based on an act of God or wrongful interference. Evidence of past forfeiture may be difficult or impossible to secure, particularly if the alleged forfeiture occurred decades or centuries in the past.[5]

Even the date of the water right holder's relative priority is subject to dispute. Imagine a farmer begins to dig a ditch to divert water to irrigate crops in November of 1941. Before finishing the diversion, the farmer is drafted into military service in early 1942, and does not return home to complete the diversion and put the water to beneficial use until 1945. In the intervening years, many other farmers have begun and completed their diversions, growing the food that fed our soldier-farmer. If the soldier-farmer is considered "diligent," his right will relate back to his first efforts to divert water in 1941. If he is not "diligent," his right will be 1945, when he put water to a beneficial use, a lower priority water right that may result in him receiving no water in some years. This law refers to this rule connecting diligence to priority date as the "relation-back doctrine."[6] Is it equitable to punish the soldier for being called off to war? Is it equitable to punish the other farmers

2. A. Dan Tarlock, *The Future of Prior Appropriation in the New West*, 41 NAT. RESOURCES L. J. 769, 770 (2001).

3. Lawrence J. MacDonnell, *Return to the River: Environmental Flow Policy in the United States and Canada*, 45 J. OF AM. WATER RESOURCES ASSOC. 1087, 1098 (2009).

4. Tarlock, supra note 2, at 770.

5. Reed D. Benson, *Maintaining the Status Quo: Protecting Established Water Uses in the Pacific Northwest, Despite the Rules of Prior Appropriation*, 28 ENVIRONMENTAL LAW 881, 885-888 (1998).

6. Lawrence J. MacDonnell, *Prior Appropriation: A Reassessment*, 18 U. DENV. WATER L. REV. 228, 280-87 (2015).

by giving him an earlier priority date, when he could have hired someone to finish the diversion for him?

Knowing the exact priority date of a certain water right can be difficult, or even impossible. The oldest, and thus most valuable, water rights are often the ones based on centuries-old evidence and on 19th Century legal standards and filings.[7] Even if we could know, with absolute certainty, the exact priority date and quantity of every water right in a basin, water law may nevertheless allow some junior water users to take before other more senior users. In a situation where a senior user is downstream of a junior user, and there is so little water in the river in that particular year that no usable quantity will reach the senior user, the law allows the upstream junior user to take out of priority under the "Futile Call Doctrine."[8]

These legal complexities within the superficially simple "first-in-time, first-in-right" rule often play out in general stream adjudications. General stream adjudications may involve tens of thousands of parties across a vast river basin litigating their relative priorities and quantities over the course of decades.[9] As is often the case in complex and lengthy litigation, complexity gives rise to inequities. What was already a complicated race to secure water rights has become an equally intense race to secure effective representation in court and a voice in policymaking.

The Potential Inequities of Prior Appropriation

Even without the complexities of prior appropriation, in its simplest form, a pure "first-in-time, first-in-right" legal rule carries risks of inequities. The rule may be a fantastic way to encourage investment, exploration, and innovation. Prior appropriation has the potential to encourage the settlement of an arid region, by promising superior title to the most valuable resource in the desert to those bold enough to settle in such a hostile environment. While it is an excellent rule to develop a desert, it may not be the best rule to manage a desert.

The rich can often afford the risks of pioneering. In a race, the person who can afford the fastest horse or car wins. The rich are likely to become richer in a "first-in-time, first-in-right" regime. In the case of water, rather than a horse or car, it might be a shovel or drill. Either way, wealth is relevant to

7. Robin Kundis Craig, *Drought and Public Necessity: Can a Common-Law "Stick" Increase Flexibility in Western Water Law?*, 6 TEX. A&M L. REV. 77, 84-88 (2018).

8. Gregory J. Hobbs, *Reviving the Public Ownership, Antispeculation, and Beneficial Use Moorings of Prior Appropriation Water Law*, 84 U. COLO. L. REV. 97, 105-07 (2013).

9. Rhett Larson and Kelly Kennedy, *Bankrupt Rivers*, 49 U.C. DAVIS L. REV. 1335, 1348 (2016).

speed, and speed matters when the law rewards whoever uses the resource first. In addition to these risks of inequities in any "first-in-time" rule, prior appropriation has all of the attendant complexities of water rights, including forfeiture, beneficial use, the relation-back doctrine, and futile call doctrine. Those who had the means to invest and innovate to secure early water rights now also have the means to hire the best water lawyers to protect those water rights.

Now, upon learning about prior appropriation, you might think, "But at the very least prior appropriation mitigates inequities for indigenous people, who are surely privileged in a regime that respects pioneering explorers and innovators who get to and beneficially use a resource before anyone else." Well… kind of. Native American tribes have federally protected rights to water implicit within their reservations, with a priority date going back to the date of the reservation.[10] Some water rights related to tribal uses that predate colonization have a priority date of "time immemorial."[11]

Despite the apparent senior priority status of tribal rights under prior appropriation laws, many tribes still confront a legacy of water inequities. The "time immemorial" rights are frequently relatively small in quantity, as they are typically based on fishing and hunting, and not large-scale agriculture.[12] While many tribes have priority dates based on treaties dating back into the 19th Century, and thus among the most senior priorities, other tribes have reservations created well into the 20th Century, and thus face risks of a call on the river and a loss of all or part of their water supply. For example, in Arizona, the Colorado River Indian Tribes' treaty was formalized in 1865, whereas the Pascua Yaqui Tribe's treaty was not completed until 1978.[13] These tribes are very differently situated in terms of the security of their water rights because of their relative priorities.

Even when relative priority privileges the rights of Native American tribes, the law still risks imposing inequities upon indigenous peoples. Under the McCarran Amendment, the U.S. Federal Government waives its sovereign immunity to be sued in state court over water rights claims, as long as those claims are asserted in state court as part of an integrated general stream adjudication. As the trustee of the tribe's water rights, this waiver of sovereign immunity requires tribes to defend their water rights in state general stream adjudications.[14] On the one hand, this allows the general stream adjudication

10. *See generally Winters v. United States*, 207 U.S. 564 (1908).

11. *See generally United States v. Winans*, 198 U.S. 371 (1905).

12. Robert T. Anderson, *Indian Water Rights and the Federal Trust Responsibility*, 46 NAT. RESOURCES J. 399, 413 (2006).

13. Trudy Griffin-Pierce, THE COLUMBIA GUIDE TO AMERICAN INDIANS OF THE SOUTHWEST (Columbia University Press, New York, NY, 2010), pp. 218-46.

14. Rhett Larson and Brian Payne, *Unclouding Arizona's Water Future*, 49 ARIZ. ST. L.J. 465, 477 (2017).

to serve its purpose as an integrated process that involves all water right holders in the basin, and avoid a piecemeal litigation of competing water rights claims in different courts. On the other hand, tribal water rights are based on federal law and may be litigated before state courts with limited resources in protracted adjudications, and before elected state judges feeling political pressure to protect a majority of their constituents.

In addition to the potential risk of inequitable outcomes arising from the McCarran Amendment, tribes may face inequities associated with the quantification of their respective water rights. Federal reservations of land have implicit water rights under the U.S. Supreme Court's decision in *Winters v. United States*, with a priority dating back to the date of their reservations.[15] Federal reservations, including tribal reservations, have a right to the "minimum amount" of water necessary to meet the "primary purpose" of their reservations.[16] The primary purpose of a Native American reservation is to establish a permanent homeland.[17] This can leave courts with the difficult task of determining the minimum amount of water necessary to establish a tribal reservation as a permanent homeland.

The U.S. Supreme Court held that the method for quantifying a tribe's right is to determine the tribe's practicably irrigable acreage ("PIA").[18] This calculus considered the arability of the tribe's land, the engineering feasibility of bringing water to that arable land, and the economic feasibility of growing certain crops on that land.[19] For some tribes, such a quantification method may seem beneficial. Tribes like the Gila River Indian Community or Colorado River Indian Tribes have reservations with large rivers running through extensive arable lands, may secure a highly beneficial quantification under the PIA standard.[20] A tribe like the Hualapai, located on the rim of the Grand Canyon thousands of feet above the Colorado River with limited arable land, may prefer a quantification method that recognizes uses like ecotourism, a major driver of the Hualapai economy.[21]

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15. *Winters*, supra note 10.

16. *See Cappaert v. United States*, 426 U.S. 128, 141 (1976); *see also United States v. New Mexico*, 438 U.S. 696, 718 (1978).

17. *Winters*, *supra* note 10, at 576-77.

18. *Arizona v. California*, 373 U.S. 546, 601 (1963).

19. *Id.*, *see also In re Gen. Adjudication of All Rights to the Use of Water in the Big Horn River Sys.*, 753 P.2d 76, 101 (Wyo. 1988).

20. Jennele Morris O'Hair, *The Federal Reserved Rights Doctrine and Practicably Irrigable Acreage: Past, Present, and Future*, 10 BYU J. PUB. L. 263, 269 (1996).

21. Dmitry M. Astanin, *Ecological and Cultural Aspects of the Evolutionary Development Models of Ecological Tourism*, 6 NEW TRENDS & ISSUES PROCEEDINGS ON HUMANITIES AND SOCIAL SCIENCES 30, 32 (2019).

The State of Arizona, in its general stream adjudication process, uses an alternative quantification method based on an Arizona Supreme Court decision in an interlocutory appeal in the general stream adjudication called "Gila V." The Gila V standard is a nuanced, reservation-specific quantification method, which considers current and projected populations and water uses, economic development, and cultural water uses.[22] This approach could result in a more equitable outcome, but it also gives state courts more leeway to reduce tribal quantification in such a technical, fact-intensive inquiry.

Many tribes have elected to avoid quantification altogether by settling their water rights. These settlements often include the tribe accepting less water in exchange for water infrastructure financing, authorization for off-reservation water leases, and the diversification of their water supply portfolio.[23] These settlements may allow tribes to transform paper water rights into wet water services, but they are made under the shadow of uncertain, and potentially inequitable, quantification methods and expensive and protracted adjudication processes. Thus, even in a regime that privileges the first-in-time, inequity looms even for indigenous peoples.

The Past and Future of Prior Appropriation

If prior appropriation risks causing so many inequities for so many people, why has it come to define our legal relationship to this most critical resource in our most arid region? One major reason is the history of mining in the western United States.

The eastern United States has relied on riparianism, a legal regime of water rights inherited from British common law, which in turn inherited that regime from Roman law. Riparian rights are appurtenant to property abutting natural watercourses. Under a riparian rights regime, owners of land abutting natural watercourses have the right to take a reasonable amount of water from the watercourse.[24]

As the promise of gold, and later copper and oil, attracted mining operations into the west, a different legal regime was required. Ore is located wherever nature put it, and miners must bring the water from the river to the ore. Riparian rights would not work in mineral rich mining regions. A new

22. *In re General Adjudication of All Rights to the Use of Water in the Gila River Sys. & Source*, 35 P.3d 68, 71 (Ariz. 2001) (hereinafter, "Gila V").

23. Larson & Payne, *supra* note 14, at 481.

24. Rhett B. Larson, JUST ADD WATER: SOLVING THE WORLD'S PROBLEMS USING ITS MOST PRECIOUS RESOURCE (Oxford University Press, New York, NY, 2020), p. 66.

regime was required to facilitate mining, one that expressly allowed for moving water away from riparian land to mining operations.[25]

Agriculture rapidly replaced mining as the major water consumer in the west. Critics of western water policy will often times note the amount of water consumed in this arid region to support irrigated agriculture. These critics will sometimes suggest that large scale irrigated agriculture is somehow inappropriate in the desert.[26] Those critics ignore 10,000 years of human civilization. Human beings learned to live together beyond family and tribe on the banks of desert rivers like the Tigris, Euphrates, Nile, and Indus. Desert rivers are the incubators of human ingenuity and civilization.[27] The great water lawyer and jurist, Justice Gregory Hobbs, said: "The water ditch is the basis of civilization."[28] We grow food in the desert because of the desert, not in spite of it. The desert river valleys' arable soil, abundant sunshine, and consistent temperatures attract and support productive agriculture.

These regions now attract new water-intensive enterprises, including semiconductor and microchip production and data centers.[29] They attract growing populations along with these new enterprises. Is it equitable for the past mining and agriculture uses to hold so much sway over the future of our deserts under prior appropriation? Is it equitable for successors of these early pioneers, including sovereign tribal nations, to sacrifice the legal rights they have reasonably relied on to make room for these newcomers?

Much of the current debate over the Colorado River centers on these questions. California agriculture and certain Colorado River tribes have relied on prior appropriation as the bulwark to protect their way of life. Strictly honoring prior appropriation will protect them and meet their bargained-for expectations, but it will hurt other users, including other tribes, who could not have foreseen how climate change has accelerated aridification within the Colorado River Basin. What sacrifices, and from whom, does or should principles of equity require?

Western Legal History Special Water Edition

This special edition of the Ninth Judicial Circuit Historical Society's Western Legal History journal is devoted to this difficult question. This

25. A. Dan Tarlock, *Prior Appropriation: Rule, Principle, or Rhetoric*, 76 N.D. L. REV. 881, 890 (2000).

26. *See., e.g.*, Dan Keppen & Mike Wade, *It's Time to Stop Crop-Shaming Western Farmers Amid Drought*, DESERT SUN (September 14, 2022).

27. Larson *supra* note 24, at 7.

28. Julie Sutor, *Colorado Supreme Court Justice Travels to Summit County to Speak on Water*, SUMMIT DAILY (May 13, 2010).

29. *See, e.g.*, Sam Shead, *Why Intel and* TSMC *are Building Water-Dependent Chip Factories in One of the Driest* U.S. *States*, MSNBC (June 4, 2021).

edition has brought together some of the best law and history scholars and practitioners from within the Colorado River Basin to consider the past, the present, and the future, of the most high stakes game of calling "Shotgun" ever.

As part of this special edition, Governor Bruce Babbitt has written a book review of Marc Reisner's 1986 exploration of water and politics—*Cadillac Desert*. This book has been a seminal and controversial part of literature on the Colorado River, and one of the most significant water leaders in the River's history reexamines that book in the light of current drought conditions and political divisions.

Dr. Eric Boime is a leading professor of the history of the Colorado River at San Diego State University. Dr. Boime's contribution to the special edition explores the concept of navigability as it applies to the river. Navigability as a functional concept is fairly straightforward: Can you navigate a boat on the waterbody? Navigability as a legal designation is complex and dependent upon history, and determines critical issues of ownership and access. These issues are all the more important and complex on an international river like the Colorado, and Dr. Boime makes an essential contribution by exploring the role of navigability is transboundary relationships with the Colorado River Basin.

Professor Robin Craig, of the University of Southern California's Gould School of Law, writes about the unique role California has played in the development of the laws governing the Colorado River, and how the history of California's settlement spurred the Compact and Supreme Court decisions that form the foundation of the Law of the River today.

Professor Joshua Getzler of Oxford University describes the broad historical background of water rights development in common law countries, and compares the development between those countries. Despite the development of prior appropriation as a means of addressing the limitations of common law riparian rights in the arid west, British common law remains foundational to all water rights, and in particular to the legal delineation of rivers themselves. This historical background is critical to understanding the intense debates over navigability, both in terms of application of the public trust doctrine to the beds and banks of rivers, as well as to the scope of the Clean Water Act's jurisdiction.

Senator Jon Kyl argued the *Arizona v. San Carlos Apache* case before the United States Supreme Court. That case upheld the constitutionality of the McCarran Amendment, which waived sovereign immunity for federal and state parties in state general stream adjudications. Senator Kyl, along with leading Arizona water lawyer John Weldon and Washington, D.C. water lawyer Ryan Smith, write about the historic significance of that decision in the Colorado River Basin.

Amorina Lee-Martinez is an historian at the University of Colorado, Boulder. Her contribution explores the historic impacts of dam development

in the Upper Colorado River Basin on the Ute tribes, and efforts to reach equitable settlements of Ute water right claims.

Lawrence MacDonnell is an attorney and scholar, and former professor of law at the University of Wyoming. His article is a broad examination of the Colorado River Compact after passing a century in effect. Professor MacDonnell's article lays out the Compact's history and evaluates its legacy.

Richard Morrison is a water attorney in Arizona who has led and participated in tribal water rights settlement negotiations. His article examines the concept of equity, and explores the relationship between equity and negotiation, particularly in the context of tribal water rights settlements.

Professor Joe Regalia teaches on the faculty of the University of Nevada, Las Vegas Boyd School of Law in the field of natural resource law. His article also explores the concept of equity, but in the context of the broader Colorado River Basin's history and integrating broader legal doctrines, like the public trust doctrine.

Dr. Tom Romero is a professor of law and a legal historian at the University of Denver. Dr. Romero writes about the fascinating intersection of the internment of Japanese-Americans during World War II and the rights of indigenous peoples within the Colorado River Basin.

Professor Shelley Ross Saxer of Pepperdine University's Caruso School of Law write about the development of pueblo water rights in the Colorado River Basin. This is one of the most fascinating and historically complex aspects of western water law, in which some communities in the United States retain water rights under Mexican (and by extension, Spanish colonial) laws. Professor Saxer's article explores pueblo water rights and their development and acceptance within the states of the Colorado River Basin.

Margaret Vick is an attorney with extensive experience representing tribes in the west in water rights proceedings. Her articles explores the nuances of the language we deploy in water rights conversations, and discusses the important distinctions between words like apportion, allocate, and appropriate.

Conclusion

I am regularly struck by the symmetry of conflict and equity, whether between my children in securing rights to the ride in the front passenger seat of the car or in complex water rights litigation across an entire river basin.

At a family dinner, if I place a bag of chips or a bowl of cubed watermelon on the table, I am likely to hear some of the same types of arguments I hear in water disputes.

"I got here first."

"I'm the biggest, so I should eat the most."

"It's not fair that the biggest should always win."

"I helped make dinner, so I should get the most."

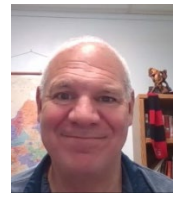
"You got the most last night, so it's my turn."

Each child has their own definition of equity, and each grounds that definition in their history. I have learned that dispute resolution often depends not on equity of outcome, but on equity of information.

Studies in human behavior have shown that people enjoying a meal together at a table will share a plate of chicken wings or shrimp more equitably if the wings are on the bones, or the shrimp is on the tail. The reason they share more equitably is because there is evidence of consumption on the plate for everyone at the table to see. Without bones or tails, someone at the table is likely to cheat and take more than their fair share.[30] If I give my children individually packaged chips or watermelon on the rind, they are more likely to equitably share without conflict, for the same reason.

Perhaps our aims in water policy should be the same. We focus so much on conserving our water, or augmenting our water, of managing supply and demand. A higher priority might be understanding our water, and better generating and disseminating accurate data. Equity of information may facilitate equity of outcome, or at least, mitigate conflict. In any event, whether calling "Shotgun" or sharing snacks, the rules governing how we share resources, and the history of those rules, will shape our future as neighbors in the Colorado River Basin.

30. Larson, *supra* note 24, at 186.



Eric Boime[*]

BORDER CROSSING: THE FUNCTION AND DESIGNATION OF A "NAVIGABLE STREAM"

"Inasmuch as the Colorado River has ceased to be navigable for commerce and the reservation of its waters," states Article IV of the Colorado River Compact, navigation will be "subservient [to] domestic, agricultural, and power purposes." That navigation was useless was a *fait accompli*, a conclusion wholly faithful to the utilitarian logic of Progressive Conservation. While it may be understandable that the first exhibit at the Hoover Dam Visitor Center proclaims navigation "a failure" (justifying the river's impoundment), the sentiment has oddly echoed in an historiography that uniformly takes "modern hydrology" as its starting point. When modern discourses do contemplate the river's pre-hydraulic past, it is often done to sanctify some glorious interlude when the Colorado ran free and unfettered to the sea; it exemplifies a "wilderness ideal" unmitigated by humans. Consequently, the short, ill-fated, seldom-referenced history of the Colorado River steamships remains unintegrated into the river's twentieth/twenty first century saga.[1]

Yet, the "failure" demands qualification. Steamships regularly plied the river between the Gulf of California and the current site of Hoover Dam from

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[*] Dr. Eric Boime is a Professor of American History and Chair of the Division of Arts and Science at San Diego State University Imperial Valley. He has published a series of articles on the Colorado River Delta and the American Conservation Movement.

1. Considering the enormous historiography on the Colorado River, the examination of its navigation steamboats have received scant examinations. Notable studies include Francis Hale Leavitt, "Steam Navigation on the Colorado River, *California Historical Society Quarterly*, 22 (March 1943); Odie Faulk, "The Steamboat War that Opened California," *Journal of Arizona* 5 (Winter 1964); Richard Lingenfelter, *Steamboats on the Colorado River*, 1852-1916 (Tucson: University of Arizona Press), 1978. None of these works integrate this period into the large history of hydraulic development. Some of the ideas espoused in this are further elaborated in Boime, "Navigating the Fluid Boundary, The Lower Colorado River Steamboat Era, 1851 -1877," Southern California Quarterly (Summer 2011).

the 1850s to the 1870s, and, in fact, they had a far-reaching impact on the river's current rectification and allocation. The Colorado's navigability was significant as both as a *function* (as a literal means to transport people and merchandize) and as a legal *designation*. Functionally, crucially, the steam-driven paddle wheelers allowed the United States to fortify and sustain key military outposts; to facilitate and oversee extensive Western migration; to survey the region; and to assail native people. They ultimately prepared the way for the transcontinental railroad line (which would render navigation obsolete), as well as for comprehensive hydraulic projects (which would render navigation impossible).

Steamboat on the Colorado River near Yuma, Arizona. Courtesy of the National Archives.

As a legal and treaty designation, the river's navigable status enabled the governments of the U.S. and Mexico to exercise jurisdiction over critical water resources threatened not only by various private interests but by each other. Federal agents from both countries could check real enterprises if they impaired navigability along any point of the river. The United States used said designation to ensure that irrigation projects unfolded as public policy. To more qualified success, Mexico used the international adoption to advance its leverage until a formal division of the waters could take place.

In both capacities, as a function and a designation, the river's navigation highlighted still another omission in the historiography: the Colorado's utilization by Mexico and the U.S. to solidify and regulate their arid borderlands. Given that the Imperial Valley, U.S.A, and Mexicali, Mexico—the upper portions of the river delta—now commandeer more than a third of the river's actual flows (amounting to 3.1 and 1.5 million acre-feet, respectively), the impact of the US-Mexican relations on the river's trajectory demands more academic and popular scrutiny. It is fundamental, not

incidental, that the Colorado is an international stream, forming the actual border for some twenty miles before flowing another eighty to the gulf. Yet, people are still surprised to learn that the All-American Canal, which staves the river at the boundary, was not an addendum to the Boulder Canyon Project Act, but the catalyst for the vastly more famous Hoover Dam.

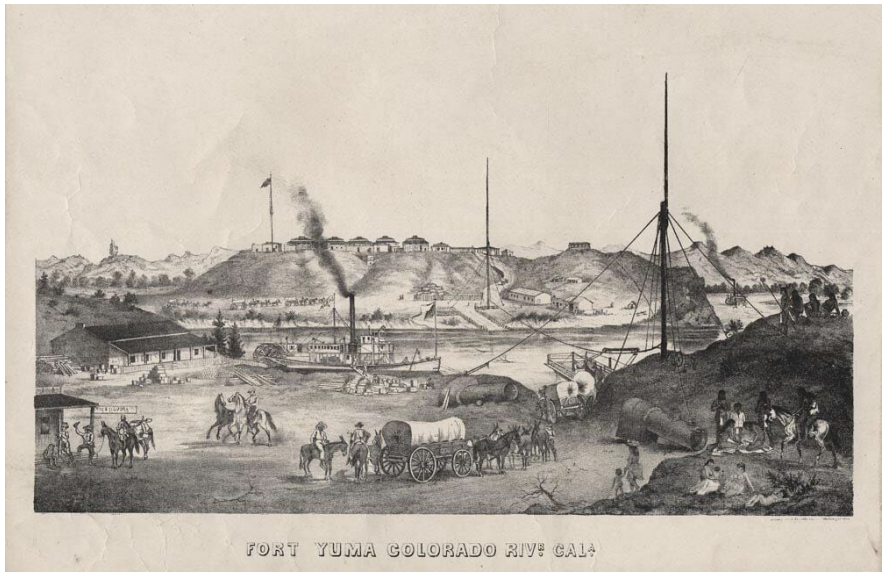
International treaty is why Article IV of the Colorado River Compact even exists. Until the Compact's ratification, the only established river rights were those that pertained to navigation, those conferred by the Treaty of Guadalupe Hidalgo (1848) and the Gadsden Purchase (1853). These covenants not only designated the river as a navigable stream, but they also prioritized trade and travel in ways that informed the new boundary line. Decades later, (despite America's already-massive territorial acquisitions) multiple American interests would rue the day their representatives ceded eighty miles of the Colorado River, including its oceanic corridor, but few people, the negotiators among them, ever imagined megacities and industrial farming in the Far West. Instead, boosters hoped the Colorado would be the "Mississippi of the West," a key artery into the Western interior. To that end, Mexico steadfastly refused to relinquish the Baja Peninsula south of the 37th parallel. According to American emissary Nicholas Trist, they insisted "upon the absolute necessity of their possessing an overland route [to California]."[2] American counterparts acquiesced, demanding, in turn the perpetual right of American "vessels and citizens [to] have free and uninterrupted passage" along the river.[3] The international boundary was subsequently drawn from the proximate center of the Gila River tributary, at the Colorado-Gila confluence. The confluence appeared as an obvious and intrinsic line of international demarcation, allowing negotiators to forgo the complicated process of surveying and charting the rugged lower delta region. Most significantly (to them), the confluence known as Yuma Crossing was a critical stopover for incoming argonauts traveling the Southern Route. For similar geographic reasons, it was also the most suitable place for laying tracks across the river. Passage, not settlement, was thus paramount in these negotiations.

The American War Department built Fort Yuma at the confluence, where it would serve as a major hub for America's nation-building apparatuses. The outpost stationed the soldiers that killed noncooperative tribes, brokered peace treaties with and among warring factions, and established the region's reservation system. The fort safeguarded tens of thousands of migrants, helped ferry them across the river, and cleared and expanded the trails along the southern route. It sheltered and protected multiple private and public surveying teams that opened wagon roads and

2. US Congress, 30th Cong. 1st Sess., *Senate Ex. Doc.* 52, *Serial* 509, 198–199, cited in Chamberlin.

3. *Treaty of Guadalupe Hidalgo, Article* 6

mapped potential railroad routes across the Arizona territory. From these surveys, the potential of the Salton Sink (what is now Mexicali and Imperial potential) became known and disseminated. In fact, it was a geologist from the Pacific Railroad Survey of 1853 that imagined the very scheme used by the first developers of the Imperial Valley. By the 1870s, newspapers were regularly reporting that the "richest alluvial deposits on the American continent is called the Colorado Desert, and the highest property valuation ever known on Earth will be noted there."[4]



Fort Yuma, Arizona. Lithograph of the river port settlement and fort c. 1875.

None of the activities would have been possible without steamships, a conclusion underscored by the ruins of Missions Purísimo de la Concepción and San Pedro y San Paulo. Quechan tribes burnt these down in 1782, less than two years after they were erected at the same spot as Fort Yuma (one on each bank of the confluence). The "Yuma Massacre," as historians termed it, resulted not only from standard Spanish maltreatment of indigenous tribes, but from the region's scarcity of resources, which invariably pitted Indians against settlers, as it often pitted indigenous peoples against each other. Sporadic overflows, key to cultivation, provided vital but inconsistent subsistence. Feast and famine conditions prevailed. Spanish colonizers appropriated indigenous farmlands, allowed chattel to consume Indian crops, and overharvested mesquite beans and other wild sources of food. The Quechan's retaliation was a major blow, not just for the mission

4. Bancroft Scraps, "Arizona Miscellany," Bancroft Library, University of California Berkeley, 285–293, 305–314, 291

inhabitants, but for the entire Spanish North American Empire. Without reinforcements of supplies and soldiers, Spanish relinquished Yuma Crossing and El Camino del Diablo (the Spanish toponym for the Southern Route), their best and last hope of consolidating their colonies. For the next sixty years, California would operate in isolation from Mexico City, making it ripe for non-Spanish occupation.

In the years before the steamships were up and running, Fort Yuma faced similar peril. It was an infamously volatile stopover along the "Devil's Highway." Quechan tribes were indispensable to migrants, whose survival often depended on their knowledge of the river's currents and the surrounding terrain, making it difficult to chart a linear devolution of ethnic relations, but it is safe to say that scarcity once again took its toll. There was simply not enough food to go around. Argonauts, like Spaniards before them, resorted to openly seizing Indian crops and stores "provoking the Indians beyond all endurances," according to one soldier. "The emigrants! Still they come," groused a military escort for the Boundary Commission. "Some are worse than ratholes to fill."[5] Indians, meanwhile, sold extra melons and pumpkins to migrants for clothing and tools until there was no surplus left to spare. To make up food deficits, they exploited the vulnerabilities of migrants, who complained that Indians purposely drowned their mules they were hired to transport or otherwise pretended to lose them downriver so that they could find and eat them later on.[6]

Ferry crossing at Yuma, Arizona.

5. William McPherson (ed.), *From San Diego to the Colorado in* 1849: *The Journal and Maps of Cave J. Couts* (Los Angeles: A. M. Ellis, 1932), 20, 48; Odie B. Fauk, ed., *Derby's Report on Opening the Colorado* 1850–1851: *From the Original Report of Lt. George Horatio Derby* (Albuquerque: University of New Mexico Press, 1969), 7.

6. David P. Robrock, "Argonauts and Indians: Yuma Crossing, 1849," *Journal of American History* (Spring 1991).

The press reported serious upswings in the number of Indian raids, thefts, and murders. Without adequate provision and reinforcements, Fort Yuma began to falter. Pack mules and wagon trains had proven prohibitively expensive and time-consuming. Sick and starving troops retreated to San Diego in such numbers that the Quechan managed to shut down ferry operations (not to be confused with the steamships, these ferried migrants between banks) and forced the remaining guards to abandon their post. Tensions grew particularly critical when a gang of American mercenaries on the lam from Mexican *federales* seized Indian watercrafts and abducted and assaulted Quechan women. The Quechan eventually killed them. Though they may have been provoked, lamented one journalist, their "lap of American blood" portended to more carnage.[7]

Steamships ultimately tipped the balance of power in favor of Anglo migrants who could not otherwise feed or shelter themselves. "[The] navigation of the Colorado by steam has been assured," reported Commander Samuel Heintzelman, "and it is now in a fair way of being a permanent station:"

> [The fort] is the most important in southern California, as it protects the southern route of American emigration in California. . .controls numerous tribes of warlike Indians, and commands the passage by land on the Pacific side into the Mexican republic.[8]

Heintzelman would become one of the leading boosters of the Colorado's navigation, insisting that it was "far superior to the Ohio" and the most practical means to establish more overland routes and to link California, Arizona, and the budding settlements of the Great Salt Lake. In the meantime, supplies brought by steamers bolstered a series of punitive expeditions against the Quechan, Cocopa, and Mojave tribes from the gulf to within a hundred miles of the Grand Canyon.[9]

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7. *San Diego Herald*, March 6, 1852, and June 28, 1852; Godfrey D. Sykes, *The Colorado Delta* (Washington and New York: Carnegie Institution and American Geographical Society, 1937), 25; Arthur Woodward (ed.), *Journal of Lt. Thomas W. Sweeny 1849–1853* (Los Angeles: Westernlore Press, 1956), 145; William deBuys and Joan Myers, *Salt Dreams: Land and Water in Low-Down California* (Albuquerque: University of New Mexico Press, 1999), 36–37, 45–47.; Douglas D. Martin, *Yuma Crossing* (Albuquerque: University of New Mexico Press, 1954), 127–137.

8. S.P. Heintzelman, *Report*. US *House of Representatives Executive Document* 76, 34th Congress, 3rd Session: 34-53; Robert L. Bee, *Crosscurrents along the Colorado: The Impact of Government Policy on the Quechan Indians* (Tucson: University of Arizona Press, 1981), 2-3.

9. Arthur Woodward, ed, *Journal of Lt. Thomas W. Sweeny, 1849 – 1854* (Los Angeles: Westernlore Press, 1956), 252; George Alonso Johnson, "The

Military contracts, in turn, supported the Colorado Steamship Navigation Company, which would dominate the transportation trade for a quarter of a century and become the most profitable enterprise in Arizona. When Fort Mojave was built in 1857, the company owner George Johnson conceded that the Mojave Indians had neither the numbers nor the inclination to pose any substantial resistance, but that "he was head over heals [*sic*] in business."[10] Hardyville, the Mojave County seat and Yuma would grow to become major distribution centers. Yuma's population ballooned to 1,300 by 1873.

Mining activity mushroomed in the wake of the military's presence. A Colorado River Rush began in earnest in the early 1860s, after the discovery of silver at El Dorado Canyon (65 miles above Fort Mojave) and gold at Laguna de Paz (130 miles above Fort Yuma). Steamship operators and soldiers cultivated the fervor not only by regaling migrants and journalists about ancient mythological diggings, but also through their own participation in the extractive trade. Johnson and his business associates purchased mines, as did Major Heintzelman and other officers. Land speculators enlisted the aid of steamer captains to begin laying out paper towns. By 1863, when Congress formally created the Arizona Territory, almost a thousand claims had been filed from Yuma to Black Canyon, and hundreds of mines were in production. Over a dozen mining districts, ranging from a few brush shacks to full-fledged towns dotted the banks.[11]

The Colorado Steam Navigation Company's "Arizona fleet," as it was popularly known, expanded to two ocean steamers, five paddle wheelers, and five barges. Every twenty days, its ships departed San Francisco, rounded Cabo San Lucas, made routine stops at Mazatlán and Guaymas, and entered the mouth. Mexico permitted the company to establish Port Isabel in a slough, where passengers and freight could be transferred from ocean to river steamers. The steamships then plied the river across two dozen landings (most of them military installations and mining camps). Over eighty percent of the steamships' trade revenue derived from inbound deliveries. Miners needed explosives and tools. Mills needed stamps and boilers and timber. Troops needed artillery and supplies. Merchants needed goods. Everyone needed food.

The short-lived wild hemp colony, Colonia Lerdo, Mexico's only steamboat landing should be singled out for its long-term significance. Founded in 1874 by Mexican national General Guillermo Andrade and his American backer Thomas Blythe, the properties became the site of modern

Stream General Jessup," *Quarterly of the Society of California Pioneers*, 9, No. 2. (June 1932), 108–118; Leavitt, 7.

10. George A. Johnson to his father, March 27, 1859, "Johnson Papers," Arizona Historical Society Library, Tucson; Coolidge 109–110; Lingenfelter, 24.

11. Leavitt, 156–157.

Mexicali. Colonia Lerdo proved to be risky gamble. It relied solely on the river's natural overflow, a leap of faith shattered by successive floods. The enterprise was flooded and destroyed in eighteen months. Still, Andrade retained the land titles, pivotal real estate he obtained through petitioning the Mexican Government. Without the steamboat trade, it is questionable if that land would have been privatized (at least not in the way that it did). The titles allowed the Los Angelino (Andrade was a Mexican Consulate for a time) to cut significant deals with Southern California land developers. The former territory of Colonia Lerdo would in fact encompass a binational irrigation system that would traverse both nations until the 1940s. The property, along with Imperial, would be ground zero for irrigation development, functioning as an integrated economic system dependent on American capital and Mexican labor and resources.

The Colorado was no Mississippi and the paddle wheelers were absolutely not the "floating palaces" that graced the literature of Mark Twain. What distinguished the river—its vast sediment load, its steep 13,000-foot descent, its widely fluctuating flows, and the stony terrain it penetrated—made nautical travel difficult and perilous. "The days were interminable," remembered Martha Summerhayes in her diary. Staterooms were so sweltering, passengers opted to sleep outside and endure sandstorms and mosquito bites. Food was seldom fresh and metal utensils burned at the touch. "The grandeur was quite lost upon us all," she recalled, "and we were

Map showing Colorado River along the US/Mexico border. Colonia Lerdo, or Lerdo Landing, was located 80 miles up the Colorado River from its mouth, just east of the river. Image courtesy of the International Boundary & Water Commission.

suffocated by the scorching heat radiating from those massive walls of rock which we puffed and clattered along."[12]

Extensive tidal activity at the head of the gulf not only made for difficult entries into the mouth, it also could have penetrated the river's shallow, narrow estuary as a steep wall of rolling water that ran upriver against and over the downstream current. Relentless sediment deposits (a given from the river that scooped out the Grand Canyon) and extensive oscillations of flows made it impossible to plot a fixed course. Pilots and their Native American crews could only speculate on the channels' whereabouts and depths. Crewmen sat vigilantly upon the bow with long poles to push off against the shifting shoals and to announce the depth ("Four! Three! Two! Two light! Quarter less two! No allí agua! [*sic*].[13] Even so, coagulations of silt forged mazes of sand bars that regularly grounded ships, leaving them to dangle on the banks. Crewmen routinely jumped ship in order to rock the vessel back into the stream, or to spin the boat backward and hack their way through with the churning paddlewheel (a technique known as "crawfishing"), or to walk the anchor forward to a deeper depth and winch the vessel forward ("grasshoppering"). When all else failed, everybody had to wait for the current to change course and dislodge them.[14]

Even in the 19th century, the Colorado was regarded as a lifeline in deficit. Demand for its flows outpaced supply. Arizonians petitioned Congress to deepen and widen the channels to allow for more traffic. By the early 1860s, tons of freight sat at Port Isabel and Yuma, sometimes for months at a time, until captains deemed the river high enough to deliver it.[15] The Southern Pacific railroad, which laid tracks across the river in 1877, effectively ended these issues, along with the long-term prospects of the steamboat trade. After the Colorado River Steam Company delivered the supplies, the lumber, and the labor to complete the rail line, the railroad purchased its remaining ships and scuttled them.

The railroad obviated the need for the "Mississippi of the West," but it promised much potential for an "American Nile." In 1901, private developers founded the Imperial Valley. Two years after that, the Reclamation Service (the future Bureau of Reclamation) selected Yuma's Laguna Weir to be the first diversion point of a larger multi-dam, river basin project. The subsequent competition for these flows made the river's "navigable" designation an issue of regional, national, and international import.

12. Martha Summerhayes, *Vanished Arizona: Recollections of the Army Life by a New England Woman* (1911); Project Gutenberg, 2008, http://www.gutenberg.org/files/1049/1049-h/1049-h.htm., 19 - 20.

13. Summerhayes, 18.

14. Francis Berton, A *Voyage on the Colorado*, 1878, ed. and trans. by Charles N. Rudkin (Los Angles: Glen Dawson, 1953), 39–45.

15. Faulk, "The Steamboat War," 2; Leavitt, 156.

The mixed legacy of the California Development Company (CDC) can be encapsulated by its most rudimentary descriptions. Small-time, capital starved, ethically challenged entrepreneurs "made the desert bloom." They precipitated a historic engineer disaster—the unintentional creation of the Salton Sea, yet they founded an enduring agricultural hub that still feeds the world. They usurped the public domain and "claimed the melting snow of the Rockies" (in the words of a contemporary critic), yet institutionalized Imperial and Mexicali's gargantuan claims.

While biblical in conception, the first comprehensive irrigation project was actually basic in execution. The river rode high along the lip of the Salton Basin. The alluvial, fecund floor lay below. Ancient, long-dry riverbeds lay between. There was no need for expensive, complex pumping mechanisms. Gravity provided the power. Topography provided the conduit. Coaxing the river out of its channel required a cut in the river's embankment, where the water could be conveyed downhill through preexisting overthrow channels. Claiming the water was likewise uncomplicated. One of the shareholders, a surgeon stationed at Fort Yuma, simply had to walk up to the riverbank, post a claim for ten thousand cubic feet of water at the proposed point of diversion (presumably with a stick and mallet), and register that claim at San Diego's County Recorder. The whole operation was done quickly and cheaply, without thought to consequences, not only to entice homesteaders (the company's clients) and investors, but to put their claims to beneficial use.

The CDC's big profits came from the manipulation of the Desert Land Act of 1877, legislation unrivaled in its capacity to produce outcome so divergent from its intents. On paper, the bill offered inexpensive arid land to (overwhelmingly white) men if, after three years, they demonstrated their federal allotment was irrigated (in other words, if they "proved up" their land). In reality, the legislation amounted to monumental government giveaway to existing private land and cattle interests. In Imperial Valley County, the spirit of the law was subverted as follows: (1) the CDC's real estate arm tantalized aspirating homesteaders with twenty-five cents-per-acre land, helping them file for cheap, government plots; (2) once secured, the only way settlers could "prove up" their land was to purchase costly "water stock" (promissory rights to purchase water), taking up large mortgages (offered by the CDC) to do so.[16]

From its inception, the CDC faced three major, interrelated obstacles, which, aggregately, culminated in a consequential congressional debate over the river's navigable status. Firstly, its janky, make-shift irrigation system kept clogging up with silt deposits. Secondly, it needed Mexico's

16. For essential history of the California Development Company, see William deBuys and Joan Myers, *Salt Dreams*: and Benny Andres, *Power and Control in the Imperial Valley*: *Nature, Agribusiness, and Workers on the California Borderland*, 1900 – 1940 (College Station: Texas A&M University Press, 2014)

permission to run its irrigation system through Mexico territory. Thirdly, the legitimacy of its operations continued to be challenged by both governments, but especially by the United States Reclamation Service. Only months after the CDC's irrigation system was operational, Congress had passed the National Reclamation Act of 1902, which created the Reclamation Service and granted it wide and unprecedented discretionary powers to construct reservoirs and dams. Service officials immediately vocalized their intentions to build a project at Yuma, and to the CDC's chagrin, they sought to integrate the Imperial Valley into its plans, wooing settlers with the promise of a more dependable waterway, one non-beholden to Mexico.

In many ways the legal and legislative battle between the Reclamation Service and the CDC was simply about turf. The upper delta comprised some of the last remaining expanses of public lands suitable for irrigation. In other ways, the conflict represented larger turn-of-the century discourse over the fate of nation's natural resource. Progressive Conservation and its bureaucratic incarnations—-The Reclamation Service, The National Forest Service, the Interstate Waterway Commission, and the National Park Service—rose as a rebuke of free-market, laissez-faire capitalism. The CDC's defilement of public land laws (that prompted indictments of some of its agents) and its wholesale creation and manipulation of "waterstock" made it a perfect foil. Without mentioning its name, President Theodore Roosevelt, "the trustbuster" called out its malfeasance in his first message to Congress: "Private ownership of water apart from land cannot prevail without causing enduring wrong."[17]

Though the Service's internal studies had deemed navigation impractical, an international treaty was the obvious means to challenge the legality of the CDC's operations. The flows of an international stream fell under the absolute jurisdiction of the United States government's War Department. Anxiety set in among the CDC shareholders. It complained about government overreach to ideologically sympathetic newspapers and successfully lobbied Congress for legislation that would recognize its *priori* claims and the priority of irrigation over navigation. The company nevertheless miscalculated the political moment, particularly the widespread popular sentiments that helped sail the Reclamation Act through Congress. One Congressman incredulously asked CDC President Anthony Heber if the CDC believed "in any limits" when private corporations endeavored to profit from public waters and lands. Heber conceded nothing: "I am opposed to the government interfering in every instance with the

17. "Message from the President of the United States," 50th Congress, 2nd Session, Document No. 212.

private property and profits of any private corporation."[18] Congress was not convinced. The bill to reclassify the river never made it out of committee.

These congressional debates ultimately drove the CDC and Mexico into tighter embrace. Heber made this intention clear when he threatened legislators, "it is my earnest desire to worship at our own altar and to receive the blessing from the shrine of our own government, but if such permission is not granted, of necessity I will be compelled to worship elsewhere."[19] In fact, the company had already commenced negotiations with President Porfirio Diaz to open a new headgate four miles south of the original heading. Tapping water directly from Mexico was essential not only to circumvent U.S. jurisdiction, but to bypass the hopelessly clogged portion of the binational waterway. Mexican ministers eyed the company with as much suspicion as their American counterparts, similarly complaining that its project breached treaty guidelines. However, the Reclamation Service's sights on Yuma, and the heralding of a robust U.S. federal presence at the delta, made the partnership attractive.

Ultimately, the Porfiriato Administration exacted monumental, city-satiating, concessions from the CDC. The subsequent contract conferred to Mexico one-half of all the water delivered and the right to set prices for water cultivating Mexican land. It further stipulated that that CDC had to organize a Mexican subsidiary—the Sociedad de Irrigación y Terrenos de la Baja California—to "perpetually deliver" that water to three million square miles (673, 350 acres) of the Mexican Delta.

These terms persisted decades after the CDC went bankrupt, which occurred less than twelve months later. The company had chosen a very bad time to leave a standing open cut (a cut with no headgate) in the riverbank. It just so happened to coincide with a once-or-twice-a-millennia event, when the river periodically, organically, turned away from the ocean and headed into the basin. In 1905, an El Nino year, the high waters arrived early winter and did not recede. The torrent plunged over the banks of the main canal and tore through the crumbly delta soil for a year and a half. By the end of that interval, almost all of the river's ferocious entirety was surging into the valley. The story of these floods, the unintentional creation of California's largest lake (the Salton Sea), and the efforts by the Southern Pacific Railroad to place the river back into its former bed is classic river lore, the obligatory prelude to any history of Hoover Dam. To make a long, complicated story short: Imperial Valley, a farming community of 15,000, had become "too big to fail," necessitating, first, that the largest corporation in the world step in and close the breach and, second, that the U.S. government build a giant dam to ensure the valley would never flood again.

18. Otis B. Tout, *The First Thirty Years*, 1901-1931 (San Diego: Otis B. Tout, Publisher, 1931), 97.

19. Ibid.

The debacle was a public relations coup for the Reclamation Service, which presented it as a failure of laissez-faire capitalism and a mandate for federal management. According to future Chief Elwood Mead, private reclamation was accompanied by a waste of effort, a loss of money, and the infliction of hardship and injustice which could have been easily prevented if State and National lawmakers had done their duty."[20] In 1911, Imperial Valley's largest landholders organized the Imperial Irrigation District, a public entity authorized to issue bonds needed to buy the California Development Company. Once the government promised to reimburse it for its efforts, the Southern Pacific was only too glad to unload it. As SP Engineer Cory explained, it was "understood that the irrigation of American land in the Salton Basin and the regulation of the Colorado River were inseparably connected, and that as soon as the situation was under control. . . the entire matter should be turned over to the [U.S. Government]."[21] Shortly thereafter, the U.S. and Reclamation Service became leery allies, united by efforts to build both a big dam at Boulder Canyon (the only way to stop the threat of floods) and an "All-American Canal" (the only way to stop the threat of the Mexican concessions).

The Boulder Canyon Bill, which blatantly oriented the river's future to that of California's, spurred the creation of the Colorado River Compact. The other basin states, demanding their fair share, found welcome accord in Mexico exclusion. Despite Mexico's official protest, Commerce Secretary Herbert Hoover's insisted that that the commission stay focused on domestic usage. It would be Arizona representatives, the compact's lone holdouts, who would raise the issue of navigation not so much to protect Mexican interests but to thwart California's outsized ambitions. When Arizona's State Water Commissioner asked Reclamation Service Director Arthur Davis if the river was still navigable, he matter-of-factly replied that the Yuma and Imperial Valley projects had "destroyed practical navigation," as if the agency had not previously maintained that such diversions were a violation of international treaty.[22] As thousands of pages of meeting transcripts make clear, the body's approach to Mexico was the less said, the better (At the twenty-second meeting, Hoover deleted twenty pages of testimony referencing Mexico because the arguments might "be quoted against us.").[23]

The issues of navigation would dog negotiations between the two nations throughout the twenties and thirties. Mexico continued to insist

20. Harry Thomas Cory, *The Imperial Valley and the Salton Sink* (San Francisco 1915), 1508-1509; Tout, 108.

21. Tout, 106-109.

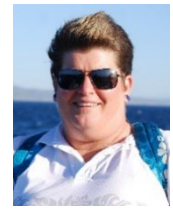
22. Minutes and Record of the First Eighteen Session of the Colorado River Compact of 1922.

23. Olson, Leslie, *The Colorado River Compact* (Harvard 1926), 35 -35; Richard Rogers, "History of Unite States-Mexican Negotiations relative to the Colorado River (Masters Thesis: University of Arizona, 1964), 60.

that no new diversionary works be made until the international treaty was rewritten and formal allocations were made. The United States, meanwhile, purposely put off arbitration until the Boulder Canyon Act was passed and Hoover Dam and the All-American Canal were underway, when the United States would wield unilateral control over the river's flows. Postponement, Senator Phil Swing iterated, was "a trump card to be used in the diplomatic game."[24] A new treaty would not be made until 1944, but the issue of navigation, as far the United States was concerned, was put to rest by the International Water Commission, which met from 1928-1929. American commissioners said that Mexico had dispensed with "the fiction of navigability," when it authorized the California Development Company to divert flows from Mexican territory and exacted its concessions.

Whatever the merits of that argument, those concessions would become a key basis for Mexico's claim of 1,500,000 acre feet of Colorado River water, as authorized by the 1944 Water Treaty. No argument made here is intended to suggest that Mexico should be grateful for this amount, but it was a remarkable attainment, considering the powerful American interests arrayed against it. The development of Mexicali in the first half of the twentieth century and the expansion of its Mexico appropriative rights is beyond the scope of this story, which is to highlight the history of the river's navigation and its navigable status. It is a history obscured by the Colorado Compact, as well as by public memory and academic scholarship. It nevertheless provides functional explanations for modern, basin-wide development and the attendant bordering processes inherent in the All American Canal and the river's international distribution. If we want to understand the border imposed by the Compact and the Boulder Canyon legislation, insight can be gleaned from earlier endeavors to negotiate the Colorado River, when the river served not only as a line of sovereignty, but as a line of defense and a line of commerce. Its navigability—the standard measure of a river's utility in the nineteenth century—was gauged by its capacity to regulate peripheral conflicts, ethnic rivalry, and resource exploitation and, therefore, it engendered processes integral to the borderline that exist to this day.

24. Phil Swing to Myron Witter, January 29, 1925, *Philip David Swing Papers*, UCLA Library, Special Collections, Box 142.



Robin Kundis Craig[*]

CALIFORNIA EXCEPTIONALISM IN THE COLORADO RIVER: A BRIEF HISTORY AND IMPLICATIONS FOR THE FUTURE

Introduction

In August 2021, amid record drought, the federal government declared a Tier 1 water shortage in the Colorado River system for the first time, affecting water users in the Lower Basin states—Arizona, California, and Nevada—who are dependent on Lake Mead. A year later, Lake Mead operations worsened to a Tier 2a shortage, which governs operations through 2023.[1] Implementation of this shortage standard according to the Colorado Basin states' 2019 Drought Contingency Plan means that Arizona reduced its normal 2.8 million acre-feet allocation from the Colorado River by 592,000 acre-feet in 2023, losing "approximately 21% of the state's annual apportionment"; Nevada reduced its normal allocation of 300,000 acre-feet by 25,000 acre-feet, "which is 8% of the state's annual apportionment"; and Mexico received reduced its allocation of 1.5 million acre-feet by 104,000 acre-feet, "which is approximately 7% of the country's annual allotment."[2]

California, in contrast, continues—at least for the moment—to receive its full non-drought share of the Colorado River, or 4.4 million acre-feet.[3] This relative insulation from Colorado River drought is the latest manifestation of California exceptionalism under the Law of the River.

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1. *Interior Department Announces Actions to Protect Colorado River System, Sets 2023 Operating Conditions for Lake Powell and Lake Mead*, U.S. DEPT. OF THE INTERIOR (Aug. 16, 2022), https://www.doi.gov/pressreleases/interior-department-announces-actions-protect-colorado-river-system-sets-2023.

2. *Id.* An acre-foot is the amount of water it takes to cover one acre of land with one foot of water, or almost 326,000 gallons.

3. *Id.* ("There is no required water savings contribution for California in 2023 under this operating condition.").

Those who learn the history of the Law of the River can easily become fascinated by Arizona's role in Lower Basin negotiations. After all, it was Arizona alone of the seven Colorado River Basin states that refused to ratify the 1922 Colorado River Compact, the interstate compact that started the "Law of the River."[4] This initial compact allocated 7.5 million acre-feet per year on average to each of the Upper Basin (Wyoming, Utah, Colorado, New Mexico, and a fraction of Arizona) and the Lower Basin (Arizona, Nevada, and California), with the division at Lee Ferry, Arizona.[5] Indeed, Arizona did not ratify the compact until 1944.[6]

The hydrologic boundaries of the Upper and Lower Colorado River Basin and the adjacent areas of the Basin States that receive Colorado River water. Courtesy of the Bureau of Reclamation.

In the interim, moreover, Arizona filed an original jurisdiction lawsuit in the U.S. Supreme Court to protest an early dam in the Colorado River system (1930);[7] sent troops (1934) to California's border to stop the construction of a different dam, the Parker Dam, which diverts water from the Colorado River into southern California[8]; and began the long process of

4. *Colorado River Compact*, WATER EDUCATION FOUNDATION (viewed April 1, 2023), https://www.watereducation.org/aquapedia-background/colorado-river-compact.

5. Colorado River Compact, art. III (1922).

6. *Colorado River Compact*, WATER EDUCATION FOUNDATION (viewed April 1, 2023), https://www.watereducation.org/aquapedia-background/colorado-river-compact.

7. Arizona v. California, 282 U.S. 795 (1930) (allowing Arizona to file the original jurisdiction lawsuit); Arizona v. California, 283 U.S. 423, 464 (1931) (dismissing Arizona's 1930 challenge to the construction of the Black Canyon dam).

8. Julia Rosen, November 10, 1934: *Arizona declares war against California at Parker Dam*, EARTH: THE SCIENCE BEHIND THE HEADLINES (Dec. 3, 2014),

getting an original jurisdiction case before the U.S. Supreme Court to challenge both the Boulder Canyon Project Act of 1928[9] and California's claims to the river (1934-1952),[10] which Arizona considered to be outsized and unfair.

Nevertheless, it was largely California that occasioned the creation of the Law of the River in the first place. This Article traces how a combination of early California settlement and the U.S. Supreme Court's recognition of prior appropriation induced the other Colorado River basin states to seek to legally protect their far more nascent claims to that river's water. The negotiations that led to the 1922 Colorado River Compact, moreover, merely began an ongoing centuries-long conversation that seeks to balance California's rights as the first developer of the Colorado River against a basin-wide equitable allocation of the river. Understanding the roots of and underlying tensions within this conversation sheds light on the current negotiations seeking to cope with a changing climate and shrinking water supply in the Lower Basin.

The Beginnings of California Exceptionalism: Prior Appropriation from the Gold Rush to the Parker Dam

Understanding California's influence on the Law of the River requires two pieces of background information. First, an understanding of how California fits into the overall development of the West is critical. Second, that first understanding is critical in part because the West adopted prior appropriation as its dominant water law doctrine, privileging first users of water.

https://www.earthmagazine.org/article/november-10-1934-arizona-declares-war-against-california-parker-dam/.

9. Act of Dec. 21, 1928, 45 Stat. 1057, *codified as* 43 U.S.C. §§ 617-617t.

10. Arizona v. California, 292 U.S. 341, 341 (1934) (dismissing Arizona's bill to preserve testimony for a future lawsuit against California challenging the Boulder Canyon Project Act); Arizona v. California, 296 U.S. 552, 552 (1935) (ordering the defendants to show cause why Arizona's bill should not be granted); Arizona v. California, 298 U.S. 558, 558 (1936), *petition for rehearing denied*, 299 U.S. 618 (1936) (denying Arizona's petition to file the complaint); Arizona v. California, 344 U.S. 806, 806 (1952) (ordering the defendants to show cause why Arizona should not be allowed to file its complaint); Arizona v. California, 344 U.S. 919, 920 (1952) (granting Arizona leave to file the complaint).

A. California and the Settlement of the West

California leapfrogged the steady movement west of European settlement in the United States.[11] Nine days before the United States signed the 1848 treaty with Mexico that would make California—and much of the rest of the Southwest—part of the United States, James Marshall, a carpenter employee of John Sutter, discovered gold.[12] This discovery triggered "the greatest mass migration in the history of the young Republic up to that time, some 80,000 in 1849 alone and probably 300,000 by 1854 . . . ."[13] As historian J.S. Holliday has summarized:

> Everything about California would change. In one astonishing year the place would be transformed from obscurity to world prominence, from an agricultural frontier that attracted 400 settlers in 1848 to a mining frontier that lured 90,000 impatient men in 1849; from a society of neighbors and families to one of strangers and transients; from an ox-cart economy based on hides and tallow to a complex economy based on gold mining; from Catholic to Protestant, from Latin to Anglo-Saxon. The impact of that new California would be profound on the nation it had so recently joined.[14]

The Gold Rush accelerated the Industrial Revolution and economic development in the United States; "[t]he influx of gold resulted in the expansion of manufacturing and the service industries, as many entrepreneurial newcomers took advantage of the demand for mining materials, lumber, clothing and transportation."[15] By the end of the Gold

11. J.S. HOLLIDAY, THE WORLD RUSHED IN: THE CALIFORNIA GOLD RUSH EXPERIENCE 25-45 (University of Oklahoma Press: 2002 paperback edition).

12. *Id*. at 25.

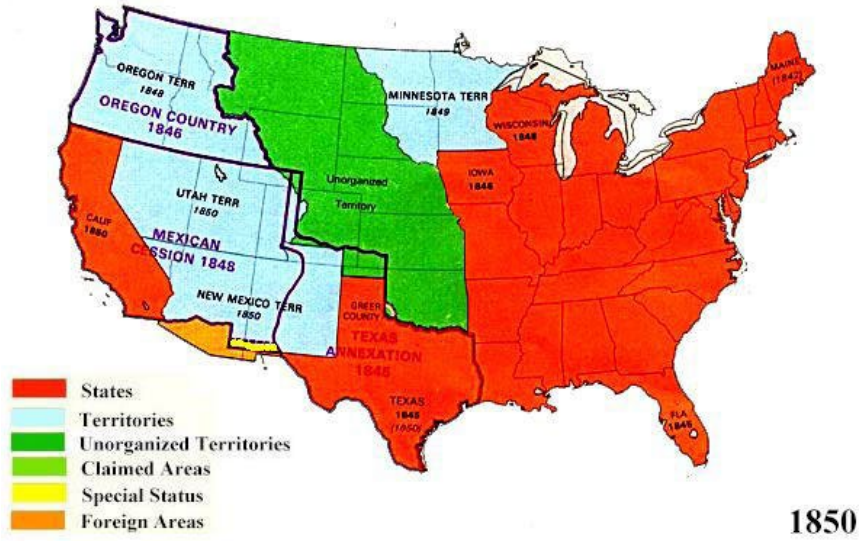
13. Malcolm Rohrbough, *No Boy's Play: Migration and Settlement in Early Gold Rush California*, 79:2 CALIFORNIA HISTORY 25, 25 (2000). *See also Historical Impact of the California Gold Rush*, NORWICH UNIVERSITY ONLINE (Oct. 2, 2017), https://online.norwich.edu/academic-programs/resources/historical-impact-of-the-California-gold-rush (noting that the California Gold Rush "prompted one of the largest migrations in U.S. history, with hundreds of thousands of migrants across the United States and the globe coming to California to find gold in the foothills of the Sierra Nevada mountains.").

14. HOLLIDAY, *supra* note 12, at 25-26.

15. *Historical Impact of the California Gold Rush*, NORWICH UNIVERSITY ONLINE (Oct. 2, 2017), https://online.norwich.edu/academic-programs/resources/historical-impact-of-the-California-gold-rush.

Rush, moreover, California had become "an economic powerhouse."[16]

One result of California's quick growth was very early statehood compared to the rest of the U.S. West.[17] California became a state in 1850, leading the rest of the Colorado River Basin states by at least a decade: Nevada became a state in 1864; Colorado in 1876; Wyoming in 1890; Utah in 1896; and New Mexico and Arizona in 1912.[18] Thus, the Gold Rush accelerated California's political and economic development, leaving it in a better position to actually use the Colorado River than the rest of the states in the Basin. At the same time, however, a new approach to water rights was developing in California that deemed "first" to be "best": prior appropriation.



U.S. Territorial Map, 1850.

B. California and Prior Appropriation

Gold mining in California was dependent on water.[19] As one result, "[w]hen the rainy season was late, each dry day cost the state's economy

16. *Id.*

17. *Id.*

18. *List of* U.S. *States' Dates of Admission to the* Union, Encyclopaedia Britannica (viewed April 11, 2023), https://www.britannica.com/topic/list-of-U-S-states-by-date-of-admission-to-the-Union-2130026.

19. Douglas R. Littlefield, *Water Rights During the California Gold Rush: Conflicts over Economic Points of View*, 14 WESTERN HISTORICAL QUARTERLY 415, 415 (1983).

$100,000."[20] Driven by gold fever, however, "westerners began to settle away from naturally existing water supplies. Major conflicts resulted that ultimately forced California to develop entirely new systems of water use and regulation."[21]

At the start of the California Gold Rush, California was still a territory of the United States, which provided one of the motivations for evolving water law to prior appropriation. "The miners were all trespassers"[22] and hence could not rely on riparian land ownership to support their claims to water, as became the law in the eastern United States.[23] Riparian law allocates the right to use water from a stream or river to the people who own real property bordering that stream or river.[24] Conversely, those who did not own riparian property had no rights to use the water.

The California miners were, essentially, water thieves. Nevertheless, the primary victims of this water theft—as well as the land squatting—were the federal government and states governments who owned this largely public land, and they mostly left the miners to themselves. The miners, therefore, were left to develop their own customs regarding rights to water, and two views began to emerge.[25] One position advocated free access to

20. Littlefield, *supra* note 20, at 418.

21. I*d*. at 418.

22. HOLLIDAY, *supra* note 15, at 37.

23. Although most legal scholars assume that the United States inherited riparianism from England, Douglas Littlefield traces a different lineage:

> Although riparian rights are part of the common law, at the time of the California gold rush they were a new legal concept and were still in the process of being defined in the courts. Riparian rights stemmed not from English common law, as is generally assumed, but were borrowed by American jurists and treatise writers from the Code Napolean. This was in part due to the post-Revolutionary desire to create an "American" legal system (some states even passed laws prohibiting English authorities to be cited) and in part a result of specific American needs. Riparian rights were first introduced to American law in the 1820s by Justices Joseph Story and James Kent, both of whom were well known for their disposition to incorporate civil law into the common law. It was not until 1833, however, that English law abandoned its version of prior appropriation as defined by Blackstone. By 1849 English jurists had accepted riparian rights, and, significantly, they cited Story and Kent as their authorities. It was this concept of riparian rights that eastern states adopted and that confronted the western practice of prior appropriation.

Littlefield, *supra* note 20, at 416 n.1.

24. I*d*. at 415.

25. I*d*. at 417.

water for all miners, while the other advocated for the ability to secure rights to provide water to distant locations and, potentially, to cash-paying customers.[26]

Prior appropriation furthered the latter vision of water's economic potential. Under this doctrine, "[t]hose who use water from a stream are entitled to divert it and diminish its flow to the detriment of those who subsequently locate upstream or downstream."[27] Prior appropriation is often summarized in the mantra "first in time, first in right." Priority matters most in times of water shortage, because junior users—those whose water rights were created later in time—must cease all water use in reverse order of priority so that senior water rights holders can take their full share. Prior appropriation rights are also perpetual, so long as the use continues, meaning that businesses and individuals in California in the 21st century continued to rely on very senior water rights established during the Gold Rush and the decades following it.

C. Prior Appropriation Becomes the Law of the West

While the debates among the miners participating in California's Gold Rush debate were critical to establishing early customs regarding water rights, they did not by themselves result in water l*aw*. Instead, courts and legislatures had to clarify how water rights would in fact work in California and the rest of the American West.

And, in fact, both courts and legislatures have been instrumental in establishing prior appropriation as the West's prevailing water law doctrine, including among the Colorado River Basin states. Moreover, these official pronouncements often served to reify mining customs into law, both state and federal. In California, for example, "the overwhelming majority of water rights cases to reach the California Supreme Court during the first decade of statehood derived from issues relating only to mining and water use, and it was the outcome of these cases that shaped the doctrine of prior appropriation."[28] The most famous of these cases was I*rwin v*. P*hillips*,[29] in which the California Supreme Court noted that it was "bound to take notice of the political and social condition" within the states and hence that it had to acknowledge the operation of prior appropriation among miners diverting water from the same source.[30] Only the riparian landowners themselves—

26. I*d*. at 417.
27. I*d*. at 416.
28. Littlefield, *supra* note 20, at 418-19 n.5.
29. 5 Cal. 140 (1855).
30. I*d*. at 146-47.

the state and federal governments—could complain about the abuse of riparian rights.[31]

Other Colorado River Basin states soon followed suit. Nevada clearly was enforcing the doctrine of prior appropriation by 1875.[32] In 1882, the Colorado Supreme Court announced that Colorado had *never* used riparian rights, only prior appropriation,[33] a view that the Wyoming Supreme Court later (1896) came to share.[34] Utah (1877),[35] Arizona (1888),[36] and New Mexico (1900)[37] recognized prior appropriation before statehood. Thus, by the turn of the 20th century, all seven Colorado River Basin states used prior appropriation to allocate their surface waters.[38]

Importantly for the numerous unpatented federal lands in the West, the federal government concurred in recognizing established customary rights; indeed, both the U.S. Supreme Court and Congress acknowledging the rule of prior appropriation among miners and others. In 1866, for example, Congress enacted the General Mining Law to govern mining claims on federal land, and the new law acknowledged and preserved established appropriation rights:

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31. I*d*. at 146.

32. Barnes v. Sabron, 10 Nev. 217, 230-31 (1875).

33. Coffin v. Left Han Ditch Co., 6 Colo. 443, 448-49 (1882).

34. Moyer v. Preston, 44 P. 845, 847 (Wyo. 1896) ("The common-law doctrine relating to the rights of a riparian proprietor in the water of a natural stream, and the use thereof, is unsuited to our requirements and necessities, and never obtained in Wyoming.").

35. Crane v. Winsor, 2 Utah 248, 253 (1877) (holding that once settlers had previously appropriated water through a ditch for their settlement, miners created a private nuisance by poisoning the water through their ore crushing operations).

36. Hill v. Lenormand, 2 Ariz. 354, 356-57 (1888).

37. Albuquerque Land & Irr. Co. v. Gutierrez, 61 P. 357, 360 (N.M. 1900) ("The doctrine of the common law no longer obtains in what is known as the 'Arid and Mountainous Region of the West,' and the doctrine of prior appropriation has been substituted for the common law, as a matter of necessity, on account of the peculiar conditions existing in most, if not all, the mountain states and territories.").

38. Two caveats are important here. First, California uses multiple water law doctrines to allocate surface waters, including prior appropriation, riparian rights, and pueblo rights, giving it the most complicated water law for surface water in the West. Nevertheless, a variety of developments over time have left prior appropriation the most common and important of these doctrines. Second, while most western states also use prior appropriation for their *groundwater*, California and Arizona do not.

[W]henever, by priority of possession, rights to the use of water for mining, agriculture, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and decisions of the courts, the possessors and owners of such vested rights shall be maintained and protected in the same.[39]

Similarly, the Desert Land Act of 1877 authorized the sale of federal desert lands but stipulated that all unappropriated waters "shall remain and be held free for the appropriation and use of the public . . . subject to existing rights."[40] Perhaps the most expansive example of Congress's deference to western states' water law (prior appropriation) came in the Reclamation Act of 1902:

> Nothing in this Act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with such laws, and nothing herein shall in any way affect any right of any State or of the Federal Government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof.[41]

Through these statutes, Congress left the sale and development of western public lands subject to state water law, increasingly defined to be prior appropriation.[42]

The U.S. Supreme Court also acknowledged prior appropriation in dealing with the use of water for mining in the West. For example, in *Atchison v. Peterson* (1874), the Court dealt with competing miners and appropriators from the Ten-Mile Creek in the Montana Territory; specifically, the defendants were alleging blocking the plaintiffs' earlier-in-time ditches with mining tailings.[43] Delivering the Court's opinion, Justice Field first acknowledged the law of riparian rights.[44] This law, however, does not apply to the mining operations on western public lands.[45] Quoting the California

39. Act of July 26, 1866, §9, 14 Stat. 251, 253.

40. Act of March 3, 1877, §1, 19 Stat. 377, 377.

41. Act of June 17, 1902, §8, 32 Stat. 390, *codified as* 43 U.S.C. § 383.

42. Dale D. Goble, *Prior Appropriation and the Property Clause: a Dialogue of Accommodation*, 71 OR. L. REV. 381, 388-90 (1992).

43. Atchison v. Peterson, 87 U.S. 507, 508-09 (1874).

44. *Id*. at 510-12.

45. *Id*. at 512-13.

Supreme Court's opinion in I*rwin v. P*hillips and noting the Mining Act of 1866, the U.S. Supreme Court emphasized a labor theory approach to water rights in the West:

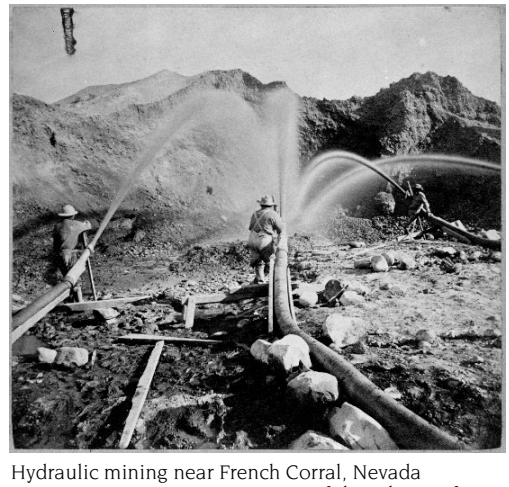
> The government, by its silent acquiescence, assented to the general occupation of the public lands for mining, and, to encourage their free and unlimited use for that purpose, reserved such lands as were mineral from sale and the acquisition of title by settlement. And he who first connects his own labor with property thus situated and open to general exploration, does, in natural justice, acquire a better right to its use and enjoyment than others who have not given such labor. So the miners on the public lands throughout the Pacific States and Territories by their customs, usages, and regulations everywhere recognized the inherent justice of this principle; and the principle itself was at an early period recognized by legislation and enforced by the courts in those States and Territories.[46]

Like Congress, therefore, the Court both recognized and applied the doctrine of prior appropriation, ultimately affirming the lower courts' refusal to enjoin the defendants' mining operations.[47]

D. The Threat of California as the Colorado River's Senior Appropriator

As noted, California developed earliest and fastest of the Colorado River Basin states. This growth helped to spur the original 1922 Colorado River Compact, through three developments.

First, California was the first state to divert water from the Colorado River. Indeed, southern Californians started viewing the Colorado as a source of water supply very early in California's statehood. "As early as 1869 Dr. Oliver Wozencraft was calling for the construction of a



Hydraulic mining near French Corral, Nevada County, CA, 1860-1870. Courtesy of the Library of Congress.

46. I*d*.

47. I*d*. at 515-16.

gravity canal from the Colorado to southeastern California," and "[i]rrigation engineer George Chaffey of Los Angeles completed such a project in May 1901."[48] "[T]he California Development Company began pulling water from the river in 1901, transporting it to the Imperial Valley through the Alamo Canal and helping transform the California desert into a farmland oasis."[49] This diversion made California the first state to appropriate the Colorado River and the senior water rights holder in the system. While the original Imperial Canal "filled with silt and its levee collapsed in a catastrophic flood in 1905," "Chaffey's canal proved that the waters of the Colorado River could be successfully brought into southern California."[50] Moreover, an improved All-American Canal (Chaffey's canal largely ran through Mexico)[51] allowed the diversion to both continue and expand:

> The Imperial Irrigation District later purchased the company, along with its right to take 2.6 million acre-feet annually from the Colorado River. The irrigation district now takes 3 million acre-feet a year, using 98% percent of it to grow crops, including water-intensive ones like alfalfa and winter vegetables, on land that would otherwise be inhospitable to most farming.[52]

The second development relevant to the 1922 Colorado River Compact was that the U.S. Supreme Court made prior appropriation relevant to interstate rivers like the Colorado through its developing doctrine of equitable apportionment. When states fight with each other, they can petition the Court to have their disputes heard there first, skipping the lower courts, through what is known as the Court's *original jurisdiction*.[53] In 1901, Kansas filed the first such case against Colorado over the Arkansas River, and the Court published its decision in 1907.[54] Kansas argued that diversions in Colorado were depriving Kansas of the full flow of the river (a riparianism argument), and it asked the Court to enjoin those diversions.[55] Noting that no state can be forced to choose either riparianism or prior

48. Kevin Starr, W*atering the Land*: T*he Colorado River Project*, 75 SOUTHERN CALIFORNIA QUARTERLY 303, 303 (1993).

49. Amy Graff, U*nderstanding California's Relationship with the Colorado River*, SF GATE (Feb. 11 , 2023), https://www.sfgate.com/bayarea/article/california-relationship-with-colorado-river-17762725.php.

50. Starr, *supra* note 53, at 304.

51. I*d*.

52. Graff, *supra* note 54.

53. U.S. CONST., art. III, §2.

54. Kansas v. Colorado, 206 U.S. 46, 47 (1907).

55. I*d*. at 47-48.

appropriation,[56] the Court instead announced that its "cardinal rule, underlying all the relations of the states to each other, is that of equality of right. Each state stands on the same level with all the rest. It can impose its own legislation on no one of the others, and is bound to yield its own views to none."[57] At the same time, however, because "Kansas thus recognizes the right of appropriating the waters of a stream for the purposes of irrigation, subject to the condition of an equitable division between the riparian proprietors, she cannot complain if the same rule is administered between herself and a sister state."[58] Although the Court ultimately dismissed Kansas's claim without prejudice, concluding that Kansas had not (yet) been deprived of its equitable share of the river's benefits,[59] it made the fact that both states allow water appropriations relevant to how a river will be divided.

This legal consequence became even clearer in the Supreme Court's 1922 decision in *Wyoming v. Colorado*, in which Wyoming sought—and received—equitable apportionment of the Laramie River.[60] The Court emphasized that both states had adopted prior appropriation as their water law[61] and that both Congress and itself had permitted and recognized their right to do so.[62] That fact distinguished *Wyoming v. Colorado* from *Kansas v. Colorado*, in which Colorado was a prior appropriation state but Kansas still largely adhered to riparianism.[63] Instead, here the controversy is between states in both of which the doctrine of appropriation has prevailed from the time of the first settlements, always has been applied in the same way, and had been recognized and sanctioned by the United States, the owner of the public lands. Here the complaining state is not seeking to impose a policy of her choosing on the other state, but to have the common policy which each enforces within her limits applied in determining their relative rights in the interstate stream.[64]

As a result, prior appropriation would furnish the primary basis for the Court's apportionment, because

> [I]t furnishes the only basis which is consonant with the principles of right and equity applicable to such a controversy as

56. *Id.* at 94.
57. *Id.* at 97.
58. *Id.* at 104-05.
59. *Id.* at 117-18.
60. Wyoming v. Colorado, 259 U.S. 419, 496 (1922).
61. *Id.* at 458-59.
62. *Id.* at 459-63.
63. *Id.* at 464-65.
64. *Id.* at 465.

> this is. The cardinal rule of the doctrine is that priority of appropriation gives superiority of right. Each of these states applies and enforces this rule in her own territory, and it is the one to which intending appropriators naturally would turn for guidance. The principle on which it proceeds is not less applicable to interstate streams and controversies than to others.[65]

Moreover, because the average flow of the Laramie River was not sufficient to reliably satisfy the appropriations in both states, the Court determined appropriative priorities across state lines in dividing the river.[66] As a result, given that "available supply is 288,000 acre feet, and the amount covered by senior appropriations in Wyoming is 272,500 acre-feet, there remain 15,500 acre-feet which are subject to this junior appropriation in Colorado," and the Court enjoined Colorado from taking more than that of the Laramie River.[67] The legal lesson for the Colorado River Basin states was clear: California's early diversion of the Colorado River in large quantities would leave the upstream states unable to use the river, absent some other legal division of the river's flow.

Finally, the third development was that the federal government seemed to be favoring California through its authorization of the Boulder Canyon Project, which would ultimately create Hoover Dam and Lake Mead. Beginning in 1921, the U.S. Bureau of Reclamation began looking for a site to dam the Colorado River to improve its availability to what would become the Lower Basin states.[68] "By April 1923, Reclamation geologists and engineers were recommending Black Canyon, a site some thirty miles southeast of Las Vegas, as the best place to impound the waters of the Colorado."[69] Two Californians introduced the Boulder Canyon Project Act into Congress in 1923, and William Mulholland, chief engineer of the Los Angeles Municipal Water Bureau, began searching for a aqueduct route to bring water from the project to Los Angeles.[70] Small wonder, then, than the other Colorado Basin states were worried:

> The moment planning seriously began in the 1920s to impound the waters of the Colorado at Boulder Canyon on the Arizona-Nevada border, it was recognized—by Arizona especially, which

65. I*d*. at 470.
66. I*d*. at 489-95.
67. I*d*. at 496.
68. Starr, *supra* note 53, at 304.
69. I*d*. at 304-05.
70. I*d*. at 305.

> fought the project to the Supreme Court—that southern California would be its prime and most immediate beneficiary. Wyoming, Utah, Colorado, New Mexico, Nevada, and Arizona, after all, were but in the infancy of their population and land-resource development. Southern California, by contrast, Los Angeles, especially, the largest city in the state since 1920, was entering into its second great boom of subdivision and population growth.[71]

Thus, just as the Supreme Court was clarifying the *legal* consequences of having a large downstream appropriator on a shared river, California, through Los Angeles, was taking the necessary practical steps to divert large quantities of the Colorado River for itself. By the time Congress enacted the Boulder Canyon Project Act in 1928, "California had already put over 5 million acre-feet to use."[72]

Given these three developments, "Anxieties about California's population growth from those in the river's upper reaches also contributed to the political climate needed for a Colorado River agreement to coalesce. If left unchecked, their thinking went, California could end up controlling the entire river, leaving every other state to scramble for what was left."[73] From this collective anxiety over California's exceptionalism—its ability and apparent willingness to appropriate most of the Colorado River before any other Basin state could really get in the game—the 1922 Colorado River Compact arose.[74]

Drought in the Colorado River: How Far Can California Push California Exceptionalism?

A. The 2019 Drought Contingency Plan

The uneven allocation of the impacts of drought in the Colorado River that has been the reality for Lower Basin states since 2021 is a consequence of the history of California exceptionalism with regard to the Colorado River, further enshrined in the 2019 Colorado River Drought Contingency Plan. "To

71. Starr, *supra* note 53, at 303.

72. A. Dan Tarlock, *The Future of Prior Appropriation in the New West*, 41 NATURAL RESOURCES J. 769, 783 (2001).

73. Luke Runyon, *The Colorado River Compact Turns 100 Years Old. Is It Still Working?*, INSIDE CLIMATE NEWS (Nov. 24, 2022), https://insideclimatenews.org/news/24112022/colorado-river-compact-turns-100/?gclid=CjwKCAjwue6hBhBVEiwA9YTx8G5H9uS7GL13lRXz5Uh7kauYJYn6tBpff2Fn7LJbR0lPtjZicXM_yRoCSxwQAvD_BwE.

74. *Id*; Starr, *supra* note 53, at 304-05.

reduce the risk of Lake Powell and Lake Mead declining to critically low levels, in December 2017, the U.S. Department of the Interior called on the seven Colorado River Basin States of Wyoming, Colorado, Utah, New Mexico, Arizona, California, and Nevada to put drought contingency plans in place before the end of 2018."[75] The states submitted their plan to Congress on March 19, 2019,[76] and Congress endorsed it in federal legislation on April 16, 2019.[77]

For the Lower Basin (California, Arizona, and Nevada) and Mexico, cutbacks are tied to water elevations in Lake Mead, the storage reservoir just east of Las Vegas created by Hoover Dam. When Lake Mead drops to 1090 feet above sea level (Tier Zero), Arizona, Nevada, and Mexico start making cuts in their water use.[78] While Lake Mead barely stayed above this level through 2019, invocations of the drought reductions depend on the Bureau of Reclamation's projections in August; as a result, Tier Zero restrictions kicked in for 2020.[79] Tier 1 restrictions, triggered when the lake elevation is less than 1075 feet above sea level,[80] kicked in for 2022;[81] the Tier 2a cutbacks for 2023 took effects because Lake Mead's elevation fell below 1050 feet.[82] At the end of March 2023, despite a relatively rainy winter and spring,

75. *Colorado River Drought Contingency Plan*, DROUGHT.GOV (viewed April 1, 2023), https://www.drought.gov/colorado-river-drought-contingency-plan#.

76. *Id*.

77. Colorado River Drought Contingency Plan Authorization Act, Pub. L. No. 116-4, 133 Stat. 850 (April 16, 2019).

78. Central Arizona Project, *Fact Sheet*: *Drought Contingency Plan*: *Arizona Implementation* 2 (Feb. 2022), *available at* https://library.cap-az.com/documents/departments/planning/colorado-river-programs/CAP-FactSheet-DCP.pdf.

79. Chuck Cullom, *Lake Mead ends 2019 above 1090' – but 2020 still brings Tier Zero declaration*, CENTRAL ARIZONA PROJECT (Jan. 8, 2020), https://knowyourwaternews.com/lake-mead-ends-2019-above-1090-but-2020-still-brings-tier-zero-declaration/.

80. Central Arizona Project, *Fact Sheet*: *Drought Contingency Plan*: *Arizona Implementation* 2 (Feb. 2022), *available at* https://library.cap-az.com/documents/departments/planning/colorado-river-programs/CAP-FactSheet-DCP.pdf.

81. Central Arizona Project, *Colorado River Shortage*: 2022 *Fact Sheet* 1 (2022), *available at* https://new.azwater.gov/sites/default/files/media/ADWR-CAP-FactSheet-CoRiverShortage-081321.pdf.

82. Central Arizona Project, *Fact Sheet*: *Drought Contingency Plan*: *Arizona Implementation* 2 (Feb. 2022), *available at*
https://library.cap-az.com/documents/departments/planning/colorado-river-programs/CAP-FactSheet-DCP.pdf.

Lake Mead's elevation was 1046 feet above sea level, almost 183 feet below its full capacity.[83] "Dead pool," the level at which releases from Hoover Dam are no longer possible, occurs at 895 feet above sea level, but the dam stops producing electricity at 950 feet.[84]

B. 2023: California Exceptionalism and the Department of the Interior

California has dragged its feet in negotiating the next Drought Contingency Plan with the six other Colorado Basin states. For example, in January 2023, and "despite a deadline from federal officials,"

> Six states presented the federal government with a proposal to slash the lower basin's use by 2.9 million acre-feet from their historic allotments—including more than 1 million acre-feet from California, or 25% of its entitlements. But California, the largest user of Colorado River water, refused to sign onto the proposal and, instead, hours later issued its own—which mirrors its offer last fall to cut imports by 9%, or 400,000 acre feet.[85]

With the Colorado River Basin states at an apparent impasse, on April 11, 2023, the Department of the Interior's Bureau of Reclamation issued a draft Supplemental Environmental Impact States (SEIS) to revise the December 2007 guidelines that guide the operations of Lake Powell and Lake Mead.[86] The draft SEIS contemplates three alternatives through 2026. The "No Action" alternative makes no changes to current management

83. *Lake Mead Water Level*, LAKESONLINE.COM (Mar. 31, 2023), https://mead.uslakes.info/level.asp.

84. *Storage Capacity of Lake Mead*, NATIONAL PARK SERVICE (updated Dec. 13, 2022), https://www.nps.gov/lake/learn/nature/storage-capacity-of-lake-mead.htm.

85. Alastair Bland, *California, Other States Reach Impasse over Colorado River*, CALMATTERS (Jan. 31, 2023), https://calmatters.org/environment/2023/01/california-colorado-river-water-2/.

86. Press Release: *Interior Department Announces Next Steps to Protect the Stability and Sustainability of Colorado River Basin*, U.S. DEPARTMENT OF THE INTERIOR (April 11, 2023), https://www.doi.gov/pressreleases/interior-department-announces-next-steps-protect-stability-and-sustainability-colorado. The requirement for a revised Environmental Impact Statement (EIS) comes from the National Environmental Policy Act (NEPA). 42 U.S.C. § 4332(2)(C).

plans,[87] but that strategy risks Lake Powell and Lake Mead reaching "dead pool" by 2026.[88] Action Alternative 1, in contrast, would cut water usage in accordance with water rights priority,[89] while Alternative 2 contemplates across-the-board even-percentage reductions in water allocations for all Lower Basin states,[90] "reducing water deliveries by as much as 13 percent beyond what each state has already agreed to."[91] Alternative 1 favors California:

> If changes were based on seniority of water rights, California, which among the seven states is the largest and oldest user of Colorado River water, would mostly be spared. But that would greatly harm Nevada and force disastrous reductions on Arizona: the aqueduct that carries drinking water to Phoenix and Tucson would be reduced almost to zero.[92]

Alternative 1 would also hurt Tribes in Arizona.[93] Alternative 2—sharing the pain—seems fairer, but it abandons legal precedent.

Above all, however, the choices that the Department of the Interior pose surface many ambiguities left in the Law of the River—ambiguities that only matter because there is not even water to fulfill all allocated shares. Three are worth discussion in the context of California exceptionalism.

87. Press Release: *Interior Department Announces Next Steps to Protect the Stability and Sustainability of Colorado River Basin*, U.S. DEPARTMENT OF THE INTERIOR (April 11, 2023), https://www.doi.gov/pressreleases/interior-department-announces-next-steps-protect-stability-and-sustainability-colorado.

88. Christopher Flavelle, *Biden Administration Proposes Evenly Cutting Water Allotments From Colorado River*, THE NEW YORK TIMES (April 11, 2023), https://www.nytimes.com/2023/04/11/climate/colorado-river-water-cuts-drought.html?auth=login-google1tap&login=google1tap.

89. Press Release: *Interior Department Announces Next Steps to Protect the Stability and Sustainability of Colorado River Basin*, U.S. DEPARTMENT OF THE INTERIOR (April 11, 2023), https://www.doi.gov/pressreleases/interior-department-announces-next-steps-protect-stability-and-sustainability-colorado.

90. *Id*.

91. Flavelle, *supra* note 93.

92. *Id*.

93. *Id*.

1. Which Basin Bears the Burden of Shortage?

The 1922 Colorado River Compact contains within it an inherent ambiguity regarding which states bear the burden of shortages in the river. Article III governs the apportionment of the river. It first states that "[t]here is hereby apportioned from the Colorado River System in perpetuity to the Upper Basin and to the Lower Basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist."[94] At the same time, however, Article III also commands that "[t]he States of the Upper Division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this compact."[95]

These two provisions present no problems when the Colorado River has at least 15 million acre-feet per year on average. In times when the river falls below that flow, however, they cannot both be fulfilled in the absence of sufficient storage in Lake Mead and Lake Powell[96]—the necessary storage that the system has lost to drought. The Compact simply does not contemplate the current reality, when neither sufficient flow nor sufficient storage exist to satisfy all parties.

Within this silence and Article III's contextual ambiguity during drought, one reading of the Compact is that the Upper Basin states must, in times of shortage, continue to deliver 7.5 million acre-feet per year (on a 10-year average) to the Lower Basin states—in other words, that the Upper Basin's obligation to deliver trumps its right to 7.5 million acre-feet per year. Given the Department of the Interior's proposals for the Lower Basin, California, Arizona, and Nevada may collectively invoke Article IX of the Compact to resolve this ambiguity.[97]

94. COLORADO RIVER COMPACT, art III(a) (Nov. 24, 1922).

95. *Id*. art. III(d).

96. *See also id*. art VIII ("Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact. Whenever storage capacity of 5,000,000 acre-feet shall have been provided on the main Colorado River within or for the benefit of the Lower Basin, then claims of such rights, if any, by appropriators or users of water in the Lower Basin against appropriators or users of water in the Upper Basin shall attach to and be satisfied from water that may be stored not in conflict with Article III.").

97. "Nothing in this compact shall be construed to limit or prevent any State from instituting or maintaining any action or proceeding, legal or

2. What Exactly Is the Scope of the Secretary of the Interior's Authority to Reallocate Colorado River Water in the Lower Basin under the Boulder Canyon Project Act?

Congress and the U.S. Supreme Court seemed to have resolved Lower Basin issues through the intersection of the 1928 Boulder Canyon Project Act and the U.S. Supreme Court's 1963 decision in *Arizona v. California*.[98] The Boulder Canyon Project Act of 1928 authorized "the Secretary of the Interior, *subject to the terms of the Colorado River compact hereinafter mentioned*, . . . to construct, operate, and maintain a dam and incidental works in the main stream of the Colorado River at Black Canyon or Boulder Canyon adequate to create a storage reservoir of a capacity of not less than 20 million acre-feet of water . . . ."[99] Construction could not occur until at least six states, one of which had to be California, had ratified the Colorado River Compact; moreover, California, through its legislature, had to "agree irrevocably and unconditionally"

> that the aggregate annual consumptive use (diversion less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this Act and all water necessary for the supply of any rights which may now exist, shall not exceed four million four hundred thousand acre-feet of the waters apportioned to the lower basin states by paragraph (a) of Article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact . . . .[100]

The Act also authorized the three Lower Basin states to enter into a compact that, in addition to giving California 4.4 million acre-feet plus half the surplus, allocated 2.8 million acre-feet plus half the surplus plus the Gila River and its tributaries to Arizona and 300,000 acre-feet to Nevada.[101]

The Act authorized the Secretary of the Interior to contract for the storage and delivery of the water[102] and specified three uses of the dam and reservoir: "First, for river regulation, improvement of navigation, and flood

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equitable, for the protection of any right under this compact or the enforcement of any of its provisions." I*d*. art. IX.

98. 373 U.S. 546 (1963).

99. Pub. L. No. 70-642, §1, 45 Stat. 1057, 1057 (Dec. 21, 1928) (emphasis added).

100. I*d*. §4(a), 45 Stat. 1058.

101. I*d*., 45 Stat. 1059.

102. I*d*. §5, 45 Stat. 1060.

control; second, for irrigation and domestic uses and satisfaction of present perfected rights in pursuance of Article VII of said Colorado River compact; and third, for power."[103] However, it also made clear that the United States "shall observe and be subject to and controlled by" both the Colorado River compact and any Lower Basin Compact later created in constructing, managing, and operating the reservoir, canals, and other works.[104]

The Boulder Canyon Project Act authorized the construction of the Hoover Dam on the Colorado River. Courtesy of the National Archives.

These provisions left several questions regarding the Secretary of the Interior's authority to allocate water in the Lower Basin, which the Supreme Court addressed in *Arizona v California*. It first determined that the Boulder Canyon Project Act constituted a *congressional* apportionment of the Lower Basin.[105] As a result, neither equitable apportionment nor the 1922 Colorado River Compact are relevant to allocating water *within* the Lower Basin.[106] Moreover, the Court concluded that the Secretary of the Interior is in charge of Lower Basin allocations—"that Congress intended the Secretary of the Interior, through his §5 contracts, both to carry out the allocation of the waters of the main Colorado River among the Lower Basin States and to

103. *Id*. §6, 45 Stat. 1061.

104. *Id*. §8(a), (b), 45 Stat. 1062.

105. *Arizona v. California*, 373 U.S. at 560, 565.

106. *Id*. at 565-66.

decide which users within each State would get water."[107] In particular, Congress had considered an allocation based on prior appropriation and rejected it.[108] Finally, rejecting the Special Master's recommendation of a *pro rata* reduction during shortages, the Supreme Court explicitly left the decision of what to do in shortages to the Secretary of the Interior:

> While *pro rata* sharing of water shortages seems equitable on its face, more considered judgment may demonstrate quite the contrary. Certainly we should not bind the Secretary to this formula. We have held that the Secretary is vested with considerable control over the apportionment of Colorado River waters. And neither the Project Act nor the water contracts require the use of any particular formula for apportioning shortages. While the Secretary must follow the standards set out in the Act, he nevertheless is free to choose among the recognized methods of apportionment or to devise reasonable methods of his own. This choice, as we see it, is primarily his, not the Master's or even ours. And the Secretary may or may not conclude that a *pro rata* division is the best solution.[109]

The Supreme Court thus seemed to have settled the current shortage issue in 1963: the Department of the Interior can deal with shortages in the Lower Basin however it sees fit. *Arizona v. California* did not address the larger Upper Basin/Lower Basin issue, however. Moreover, Congress made another important change to Lower Basin allocations in 1968 that complicates any straightforward application of the 1963 shortage decision.

3. What About Arizona's Subordination of Its Priority to Get the Central Arizona Project?

While Arizona legally secured an allocation of 2.8 million acre-feet of the Colorado River in 1928 through the Boulder Canyon Project Act and *Arizona v. California*, it needed federally funded infrastructure—the Central Arizona Project—to actually use the water.[110] California used this fact and its political clout to alter the outcome of *Arizona v. California*. "California was able to force Arizona to subordinate her CAP priority to California's compact allocation as the price of congressional authorization of the project."[111] Through the 1968 Colorado River Project Act, Congress ensured that

107. *Id.* at 580-81.
108. *Id.* at 581.
109. *Id.* at 593.
110. Tarlock, *supra* note 77, at 784.
111. *Id.*

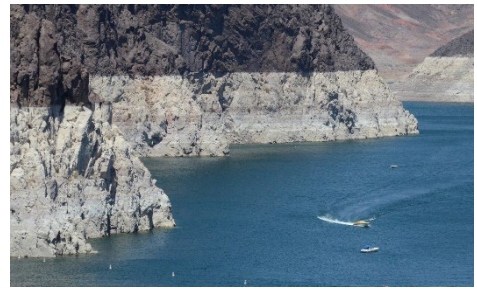
California would get its 4.4 million acre-feet per year in times of shortage before any Colorado River water is diverted into the Central Arizona Project.[112]

Unlike the Colorado River Compact, this provision of the 1968 Act *did* explicitly contemplate water shortage in the Lower Basin—and it explicitly altered the application of the *Arizona v. California* decree. The subordination provision applies "in any year in which, as determined by the Secretary, there is insufficient main stream Colorado River water available for release to satisfy annual consumptive use of seven million five hundred thousand acre-feet in Arizona, California, and Nevada."[113] As such, the 1968 Act both is more specific than and post-dates the Boulder Canyon Project Act (by forty years). Under well-recognized rules covering potentially conflicting statutes, the Colorado River Project Act should thus control.[114] More basically, the Supreme Court's reading of the Boulder Canyon Project Act in *Arizona v. California* turned most essentially on Congress's authority to apportion the Lower Colorado River, so it would be illogical for the Court to ignore Congress's later refinement of the 1928 scheme.

If the Supreme Court or the parties agree, the Secretary of the Interior's proposal to institute percentage reductions in all three states would violate federal law. Instead, Arizona would be obligated, under federal law, to stand in line behind California.

Conclusion

California exceptionalism has long driven the Law of the Colorado River. Gold Rush mining generated a fast-growing population with both the desire and the capacity to use more water than the state has, in places where large amounts of water do not occur. California was the first state to divert and use Colorado River water; that fact, in combination with Supreme Court case law



Lake Mead in 2014, pictured at its lowest water level since the 1930s. The top of the white ring indicates the highest historical water level. Courtesy of the National Oceanic and Atmospheric Administration.

112. Pub. L. No. 90-537, §301(b), 82 Stat. 887 (Sept. 30, 1968), *codified as amended*, 43 U.S.C. § 1521(b).

113. 43 U.S.C. § 1521(b).

114. *See* National Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 662-64 (2007) (choosing the more specific statute over the later in time when forced to choose, but recognizing both rules).

governing interstate rivers shared by prior appropriation states, resulted in an interstate compact that deviated from strict prior appropriation across state lines but failed to articulate a different legal methodology for dealing with water shortage. Even within the confines of the compact, however, by 1963, California had contracts with the Secretary of the Interior for 5.362 million acre-feet from Lake Mead[115] and in 1968 convinced Congress to give it priority access to its 4.4 million acre-foot allocation. The state has only recently been reducing its usage to back within that allocation. Notably, however, in 2019, California used only 3.858 million acre feet of Colorado River water.[116]

California thus epitomizes a longstanding tension underlying the Law of the River: seven states eagerly willing to adopt prior appropriation within their own borders decry its application to interstate waters—except, like California for the Colorado and Wyoming for the Laramie, when prior appropriation makes the downstream state the water winner. The compact's and statutes' failure to provide a clear and agreed-upon rule for shortages threatens the return of the Law of the River to litigation, potentially pitting California against Arizona and Nevada, the Lower Basin against the Upper Basin, and the Supreme Court against Congress.

115. *Arizona v. California*, 373 U.S. at 562.

116. John Fleck, *California's 2019 Use of Colorado River Water Lowest Since 1950*, JFLECK AT INKSTAIN (Dec. 31, 2019), https://www.inkstain.net/2019/12/californias-2019-use-of-colorado-river-water-lowest-since-1950/.

Joshua Getzler[*]

OWNERSHIP AND CONTROL OF FRESH WATER IN COMMON LAW CULTURES

1. The common law developed its doctrines of water rights by combining ideas drawn from the native feudal law of land possession, easements, trespass and nuisance, together with imported Romanistic servitudes or specific incorporeal rights of grant, allied with more general *res communes* or things held in common by mankind as natural rights. This amalgam of common-law and civilian legal concepts was hardly elegant or stable; but it did provide a serviceable set of solutions for governing the allocation of inland fresh water during the long span of agricultural, industrial, urban and transport development in England from the Conquest down to modern times.

This article sets out the basic doctrines of historical water law in England and also touches on jurisdictions, such as the former colonies of the British empire and the states of America, that borrowed from and adapted English law. An historical and comparative overview of the common-law cultures of water control can help practitioners appraise their own systems in places where water law is of supreme importance, such as the western parts of the United States. Those seeking deeper knowledge of the relevant doctrines have good monographs to consult in many jurisdictions.

2. Water rights were early described in English legal tradition as a common or public good belonging to all, i.e., outside the patrimony of rights belonging to persons as private property or objects of *dominium*. The most important early contribution was found in Henry de Bracton's massive treatise

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O*n the* L*aws and* C*ustoms of* E*ngland* (c.1220-25). There the author(s) followed the I*nstitutes of* J*ustinian* (promulgated as an appendix to the D*igest of* J*ustinian* in 533) to hold that running water was a *res communes*, or common good:

> By natural law these are common to all: running water, air, the sea, and the shores of the sea, as though accessories of the sea.[1]

Moreover, "the use of river banks, as of the river itself, is also public by the *ius gentium* [the law of all peoples]," with Bracton adding that:

> [T]his is to be understood of permanent rivers, for streams that do not flow uninterruptedly may be privately owned. Those things are taken to be public that belong to all people, that is, which are for the use of mankind alone. Those that belong to all living things may sometimes be called common.[2]

Bracton's Romanistic ideas were woven into later legal development, appearing prominently in Sir William Blackstone's C*ommentaries on the* L*aws of* E*ngland* (1765-69) and in many of the leading 19th century common law cases.[3] But the language of public and communal right lifted from Roman law cannot be taken too literally as an encapsulation of the common law's solutions to water allocation. "R*es communes*" and "*publici juris*" were largely rhetorical claims designed to show that water rights did not fit neatly into categories of real possessory right or individually defended seisin. By harnessing the prestige of Roman classical law as a medium of expression, the early English treatise writers could skate over the relative under-development of their own working laws. When Bracton goes on to enumerate and describe the many examples of water claims in feudal and common law, little or no use is made of the framing ideas of *res communes* and *publici juris*. The Latin tags almost seems as borrowed conceptual ladders that can readily be kicked down and discarded.

3. More practically the early common law developed or recognized a large set of aquatic "easements," or advantages touching land in the control of water, for example allowing access to water sources for human or animal consumption, or permitting the conducting and extraction of water from one locale to another, or licensing the expulsion of floodwater and rain to protect

1. Henry Bracton, O*n the* L*aws and* C*ustoms of* E*ngland*, f. 7b–8 (S.E. Thorne, ed, Cambridge MA, 1977) ii, 39-40, paraphrasing Justinian, I*nstitutes*, 2.1.1.; D*igest of* J*ustinian*, D.1.8.2.pr.–1. (Marcianus).

2. Bracton, above n. 2, f 8, ii, 40 (Ulpian); D.43.8.3.pr.–1. (Scaevola), 4. (Celsus); D.43.12.1.3. (Ulpian). Paul alone treats the river banks as well as the waters as public property: D.41.1.65.1.; 43.12.3.pr.

3. See Getzler, A H*istory of* W*ater* R*ights at Common* L*aw*, above n. 1, 153-192, 268 ff, for detailed exegesis.

Henry de Bracton was appointed to the coram rege, the advisory council of Henry III of England. This image is a depiction of Henry III's coronation in the 13th century.

land and buildings. Most of these easements were appurtenant to one estate so as to give advantages over another estate, on the model of Roman praedial servitudes that originated in physical ownership of aqueducts or pathways crossing another's land. But usufructuary easements *in gross* giving particular persons incorporeal claims over another's land without benefit to adjoining land were also known to English law, though outside the closed list of possible Romanistic rights. Many such easements *in gross* were local specialty rights based on custom, vesting access to natural resources in resident groups, and described variously as "commons" or "profits." Such specialty claims might be specific to a group or locale, and generated by a local feudal or manorial or borough jurisdiction; though strictly individuated and local, such claims might still be enforced "from without" by the common law, as a dimension of the Crown's power of feudal regulation and enforcement of covenants.[4] The Bractonian jurists ended up pursuing a rather incoherent dual strategy. On the one hand they were quick to adopt the cultured Romanistic language of praedial servitudes, or rights annexed to dominant estates giving positive or negative rights over adjoining servient estates, including watercourses, lakes or reservoirs, and cisterns.[5] On the other hand they recognized the various extant easements *in gross*, commons and profits even though these could not so easily be fitted within the prestigious classical Roman taxonomy. Thus, the Bracton treatise just cites the native writs without exegesis, and without trying to explain how they sat with the praedial and common rights derived from Justinian. Perhaps the judges who wrote the treatise were aware they were offering a work in progress, not a final word.[6]

4. This law is unpacked in John W. Salmond, "The History of the Law of Prescription," in J. W. Salmond, *Essays in Jurisprudence and Legal History* (London, 1891) 73-122; further expounded in F. Pollock and F. W. Maitland, *The History of English Law Before the Time of Edward* I 2 vols. (Cambridge, 1895, 2nd ed., 1898, reprinted 1968) ii, 140-143 ff; Getzler, above n. 1, 88-92.

5. Bracton, above n. 2, iii, 192-193. Bractonian prescription theory annad its relation to local custom is analysed in Getzler, above n. 1, 65-97.

6. Bracton, above n. 2, iii, 199.

4. From as early as the 13th century, the natural water incidents belonging to riparian land (i.e., land adjoining a river or lake) and the artificial water servitudes added to dominant estates were protected by the same set of royal actions, chiefly the various nuisance (*nocumentum*) writs. Such writs could come in different forms sued out in different courts, including real vindicatory actions yielding remedies such as orders requiring physical maintenance of water access or removal of impediments to *quasi-* possession or enjoyment; and trespassory actions affording damages remedies for interferences in water enjoyment. Common-law interventions protecting water rights could be seen not only as the upholding of property rights, but also as an important dimension of regulation of the feudal economy. Courts of local feudal jurisdiction took a strong role in protecting water entitlements and suppressing nuisances, and the common-law actions described by Bracton can be interpreted as Crown afforcement of local claims. Only from the later 14th century, as the convenient trespass damages remedies took over, did the common law come to control most water adjudications with a set of limited and defined general claims, so displacing the customary speciality rights which had a very wide local variance. But a localism of water rights persisted right down to modern times, under the surface of the common law's regulation and often interacting with common-law doctrine in the guise of provable or recognized customs.

5. The Crown also had a direct governmental role in regulating access to water resources at a national level, hovering above the private law administered by the judges including feudal or local claims. From early times the Crown made prerogative claims to property or *dominium* in foreshore and seabed, and also prerogative rights to supervise navigable rivers as public highways. The rights over these waters held by the Crown are dedicated to the public, and include rights to navigation, fishing, and *semble*, recreation. Sometimes Romanistic language of public rights, *publici juris*, could be used to describe the Crown's duty to maintain public access. But a more native vocabulary harnessed ideas of the feudal responsibilities of the Crown to wield its prerogative power for the public good. The idea traces back to Magna Carta 1215, which affirmed the duties of the Crown to protect free navigation of rivers, imposing an obligation on both Crown and subjects to remove obstructive fishing weirs:

King John, who granted Magna Carta, as shown in Cassell's History of England.

> All fish-weirs shall be removed from the Thames, the Medway, and throughout the whole of England, except on the sea coast.[7]

Crown executive action to maintain the public trust over inland waters and protect free navigation continued from the 14th to the 16th centuries. For example, in 1535 we find an executive commission led by Thomas Cromwell resolving as follows:

> All weirs noisome to the passage of ships or boats to the hurt of passages or ways and causeys [i.e. causeways or damming walls] shall be pulled down and those that be occasion of drowning of any lands or pastures by stopping of waters and also those that are the destruction of the increase of fish, by the discretion of the commissioners, so that if any of the before-mentioned depend or may grow by reason of the same weir then there is no redemption but to pull them down, although the same weirs have stood since 500 years before the Conquest.[8]

Portrait of Thomas Cromwell by Hans Holbein the Younger.

6. In modern times American jurists took the "Magna Carta" feudal model of Crown prerogative rights and powers dedicated to ensuring public access to and protection of environmental resources, and relabeled it as a "public trust." This can be seen as a "republicanization" of the prerogative, recasting it as a dimension of state control of public lands and protection of public amenity in the environment. The seedbed was the United States Supreme Court decision in *Martin v. Waddell's Lessee* 41 U.S. 367 (1842), holding that the state of New Jersey as local sovereign in succession to the Crown held the seabed and all submerged lands subject to tidal flows on a perpetual public trust for the common good of the public. That doctrine was extended in *Illinois Central Railroad v. Illinois* 146 U.S. 387 (1892), where the Supreme Court granted the state of Illinois perpetual control of navigable waters of the Great Lakes, creating a general doctrine of dedication of water bodies and other natural resources to the state as the protector of the community. The public trust model of water regulation became a staple of 20th century American environmental law, propelled by a

7. Magna Carta 1215, cl 33.
8. The Lisle Letters (M St C, Byrne, ed., Chicago, 1981) ii, 628.

seminal article written by the water lawyer Professor Joseph Sax in 1970.[9] The public trust doctrine was sometimes adapted from protection of general community use to accord protection to native groups, for example implying priority of water access to the inhabitants of native reservations as necessary implications of treaty rights establishing those reservations, which is further discussed below.

7. Returning to historic English jurisdiction: alongside the prerogative jurisdiction there was also an active jurisdiction sounding in public nuisance allowing private citizens to invoke "relator" actions brought formally by the Attorney General or other Crown law officers in order to remove obstructions to public rivers, canals, and reservoirs, and also to abate water pollution.[10]

Yet another source of public dedication of water resources concerned Crown corporate ownership. Where the Crown or some public agency authorised by the Crown or by Parliament owned the land within which the freshwater is located, then the water would either vest in the Crown in person as a conventionally seised owner; or it might vest in the Crown as agent or representative of the public, as with land dedicated under a public or charitable trust (a prerogative form of control regulated by the Courts of Chancery and King's Bench). Indeed "public trust" in the English common law tradition is taken as a synonym for a charitable purpose trust.[11]

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9. Joseph L. Sax, "The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention" (1970) 68 *Michigan Law Review* 471; see further Joseph L. Sax, "Liberating the Public Trust Doctrine from its Historical Shackles" (1980) 14 *University of California Davis Law Review* 185; Sax, "The Limits of Private Rights in Public Waters" (1989) 19 *Environmental Law* 473; Sax et al., *Legal Control of Water Resources*, above n. 1; P. Deveney, "Title, Jus Publicum, and the Public Trust: An Historical Analysis" (1976) 1 *Sea Grant Law Journal* 13; R. Ausness, "Water Rights, The Public Trust Doctrine, and the Protection of Instream Uses" (1986) 2 *University of Illinois Law Review* 407; Carol M. Rose, "Joseph Sax and the Idea of the Public Trust" (1998) 25 *Ecology Law Quarterly* 351.

10. See C.T. Flower, ed, *Public Works in Mediaeval Law Vols. 1 and 2* (Selden Society, London, xxxii, 1915, xl, 1923) for detailed exegesis of these actions. The legal theory underpinning the historical nuisance actions is explored in Janet Loengard, "The Assize of Nuisance: Origins of an Action at Common Law" (1978) 37 *Cambridge Law Journal* 144.

11. See for example *Henry Goodman and John Blake, the Younger v The Mayor and Free Burgesses of the Borough of Saltash In the County of Cornwall* (1882) 7 App. Cas. 633, 650-651 (HL) per Lord Cairns, concerning a borough corporation's control of an oyster fishery on a seabed below tidal waters, vested prescriptively as a "charitable, that is to say, a public trust or interest" in the corporation.

8. The final general form of public dedication of water resources to note concerns statutory authorization. For example, the Crown or public entities or officials may be vested by legislation with control of civic or military infrastructure, or with lands and waters for public use such as national parks. Such corporate public ownership will be subject to a bespoke legal regime as set out in the authorizing statute, and the details or typology of such publicly regulated water usages would be left for further administrative and judicial interpretation. By the 20th century, direct state control of surface and ground water via legislative schemas came to displace common-law entitlements to water, with public appropriation and trading licences accompanied by official monitoring, rationing and pricing of water access. Then in the late 20th century with waves of privatization of government functions, the control of water bodies and supply might be vested in private utility companies, guided by regulating authorities of varying competence and independence. But that system of regulated private markets exceeds our story of historical evolution of water doctrine.

We now turn to specific instantiations of legal control of waters:[12]

9. Where there is a navigable tidal river of freshwater, the navigable portion of the tidal inlet and the waters and underlying soil are prima facie subject to the Crown's prerogative claims.

10. The channel of a public navigable river (whether tidal or not) is properly described as a common highway, and by analogy there is a public right of traffic on the river, and both subjects and the Crown can sue to remove impediments to such traffic.

11. Where there is a non-navigable tidal river of freshwater, the tidal inlet would seem to be disposed of as a normal river with riparian water rights and the soil of the river bed accorded to the private owners of the bank, and is not subject to prerogative or public rights.

12. Rights to use and enjoy the water flow in natural rivers and streams, whether navigable or not, are established on the basis of reasonable usufructuary rights accorded to all in-stream users as an appurtenance to their riparian lands. This was established, after centuries of debate, in the case of *Embrey v. Owen* (1851) 6 Exch. 353; 155 E.R. 579 (Ex.). This case synthesized sources from Roman classical law, American case-law and treatise writings, French law before and after codification, and English treatises, notably *Gale on Easements*,[13] which itself drew heavily from Roman and French doctrine.

12. The voluminous sources upon which the following sections rest are not cited here in detail; see further H.J.W. Coulson and U.A. Forbes, *The Law Relating to Waters, Sea, Tidal and Inland* (1st ed, London, 1880; 6th ed, by S.R. Hobday, London, 1952); Getzler, above n. 1.

13. Charles J. Gale, *Treatise on the Law of Easements* (1st ed, with T. D. Whatley, London, 1839).

13. Riparian rights to natural waters are appurtenant to the adjoining land, and are enjoyed as an incident of the possession of that land.

14. There is no possible property right to water in flowing streams or lakes, exigible against third parties, that is severed from the ownership of adjoining land. In the language of the modern (not the medieval) common law, there is no easement of water *in gross*. The elimination of easements *in gross* from the list of possible property rights began with Bracton's use of Roman servitude concepts, and was quickened by legal support for enclosure and standardization of proprietary incidents from the 16th to 18th centuries. The process was perfected by William Blackstone's time (later 18th century), and hardened into dogma in the classical common law of the 19th century. It is not conceptually or historically impossible to conceive of water rights *in gross* not being appurtenant to precisely benefitted land, but to revive such claims is to overturn some lengthy developments in common law thinking.

15. There can, within carefully constrained limits, be contractual assignments of water by sale from a riparian owner to a non-riparian purchaser, provided allocation does not exceed the riparian owner's own reasonable or legally augmented usage rights.

16. A non-riparian purchaser or assignee of water cannot sue other riparians for interference whether by impeding of flow or pollution; only the riparian assignor has a position to do so. This was established in the important case of *Stockport Waterworks Company v. Potter* (1864) 3 H. & C. 300; 159 E.R. 545 (Ex.), though Bramwell B there registered an important dissent arguing that the purchase of a water allocation could piggy back on the existing duty not to corrupt water supply and so expand exigibility of water protections, using in effect an adumbration of the neighbourhood concept. Bramwell's theory did not take hold.

17. Usage or entitlement to in-stream water by any single riparian is unlimited, provided there is no adverse effect on the quality or quantity of water available to adjoining riparian owners, upstream or downstream to any reasonable distance.

18. Where there is competition for water resources between riparians such that usage by one is adverse to others, then usages are capped at the "reasonable" needs of each riparian parcel of land.

19. Reasonable use is taken to mean usage for consumption, agriculture and manufacturing appropriate for the locale. It can include rights to abstract, to pollute including to heat or cool, and to impede or enlarge the velocity and volume of flow by use of dams and races (important in hydropower contexts).

20. Expanded abstraction or exploitation of water beyond reasonable use can be justified if there is no sizeable impact on water flow and quality to neighbours; or if there has been explicit grant by those neighbours affected; or evidence of an implicit grant by acquiescence; or prescription in favour of the enlarged allocation by longer user as defined by a combination of common law, limitation acts, and prescription acts. The enlargement of

natural incidents of water use is conceptualized as the grant of an augmenting servitude to water negotiated with adjacent or affected estate holders.

21. Rights to water collected in bodies such as lakes or reservoirs is accorded wholly to the owner of the underlying subsoil if a sole owner, and divided between adjoining owners according to the reasonable use doctrine that applies to rivers.[14]

22. After much debate, it was decided that there was no protected natural enjoyment of water in an artificial watercourse. Rights partaking of the nature of servitudes could be attained by the usual methods of explicit or implied grant or prescription, and also by local custom or specialty, especially common in Cornwall, Devon, The Peaks, and other mining districts; and there could also be protected rights by local and personal legislation pertaining especially to transport and irrigation canals.[15]

23. Natural rights in artificial water courses could exceptionally be recognized where (i) the watercourse channeled a natural source; and (ii) where the harm to the water supply being resisted involved pollution, which was seen as inimical to the land and environment in any case and worthy of repression.

24. The most litigated and controversial point in English water law involved finding the right balance in ascribing "reasonable" uses to riparian owners. Some metric was needed to establish what level of water use each rival owner might enjoy without unbalancing the correlative claims of others. The courts zigzagged between requirement of an ancient established use as foundation of a protected water interest, or a recent appropriative use, an actual present use, or a right in grant from neighbours independent of or merely anticipating use, or a use concomitant with the current tenor of local development. Ultimately the English courts plumbed for the measure of use consistent with the like use of others, in a spirit of give and take. This latter test was encapsulated by a pleasingly elegant maxim derived from the Stoic and naturalist philosophy of the Roman jurist Ulpian: *sic utere tuo ut alienum non laedas* – "so use your own as not to harm that of another." The courts acknowledged that this could prove to be an unstable equilibrium; the whole problem was defining what was a harm, which demanded an answer to the question of which interest was being protected. It was not clear if this was a jury question of fact, or a question of law for the judge. Ultimately the maxim served as a guide for the judge to search for the agreements and practices of the parties themselves as self-constituting their interests, a kind of legal detection of an existing social equilibrium. The vacuousness of the test, confusing harm and interest, turned out to be a serviceable method of returning the problem to the parties for self-regulation. There was really no

14. The historical principles are exposed in *Borwick Development Solutions Ltd v Clear Water Fisheries Ltd* [2020] EWCA Civ 578.

15. Getzler, above n 1, 232-59.

external standard of correct water usage; the judges tried to help the parties recognize and stick to their own local solutions, as umpire recording the score rather than adjudicator setting and applying the rules. In other words, the basic law of water allocation between rival riparians was procedural rather than substantive.

25. There were also rights to expel water or drain water away, subject to a similar regime of core natural incidents augmented by add-on servitudes in grant, and customs and specialties.

26. As an adjunct to the last category, there was a right not to be flooded, and in the mid-19th century nuisance actions were stretched to yield a right to sue for damage caused by escaping waters where liability was imposed unless the collector of the escaped water could show that the escape was akin to an act of God outside human agency. The "strict liability" for escaping waters, known for its leading case of *Rylands v. Fletcher*,[16] was ultimately absorbed back into fault-based negligence, with protections controlled by the standard of care metric.

27. The riparian reasonable use doctrine was affirmed at the highest level of authority, and applied externally to Quebec, by the Privy Council in the 1858 case of *Miner v. Gilmour*.[17] There it was stated that there was no real difference between the English common law position, Roman law and old French law as applied in imperial and dominion territories.[18] The same principles were also applied by the House of Lords to Scotland, which had tended to emphasize Romanistic natural rights over customary and specialty rights, but which had basically anticipated the developed English position of correlativity, in a series of cases stretching back to the early 17th century. In the 1877 Scottish appeal of *Orr Ewing v. Colquhoun*[19] Lord Blackburn in the House of Lords reviewed the settled Scottish jurisprudence and found that English law had finally come into alignment so that the principles of the two systems were now identical. This was not the only case of Scotland doctrinally colonizing its southern neighbour. The Anglo-Scottish synthesis in *Orr Ewing*, together with the imperial case of *Miner*, was accepted as the definitive restatement of water law from this time onward, and little further creativity was exhibited in the common law. When the Privy Council came to decide Romano-Dutch water law in the Cape Colony in the *Hugo* case of 1885, Lord Blackburn leading the Court overturned settled local law, which had tended

16. *Rylands v Fletcher* (1865–68) 3 H. & C. 774; 159 E.R. 737 (Ex.); L.R. 1 Ex. 265 (Ex. Ch.); L.R. 3 H.L. 330 (H.L.)

17. (1858) 12 Moore P.C. 131; 14 E.R. 861 (P.C.).

18. David Schorr, "Riparian rights in Lower Canada and Canada East: Inter-imperial legal influences" in *Imperial Co-operation and Transfer, 1870-1930: Empires and Encounters* (Roland Cvetkovski & Volker Barth, eds, London, 2015) 107-126.

19. *Orr Ewing v Colquhoun* (1877) 2 App. Cas. 839 (H.L. (Sc.)).

to a prior appropriation theory allowing capture by the first user, and installed the British orthodoxy in its place.[20] Many years later in post-apartheid South Africa water law was transformed by constitutional interpretation into a human right, imposing a duty on the state to vouchsafe secure water supplies for all citizens.[21] This precedent has found echoes in many other jurisdictions,[22] though courts have had great trouble operationalizing a doctrine that converts the tribunal into a budgetary decision-maker.[23]

28. Australian law in the 19th century generally tracked the English common law position. In practice a reciprocal system of water sharing was displaced by a race to capture water scarce resources. Water monopolies emerged in the hinterland as squatters would occupy land containing springs, rivers and ponds (billabongs), often with officialdom playing favourites. Control of the water supply brought control of vast swathes of pastoral and arable land as other selectors could not survive on unwatered land and sold up. The state reacted from the late 19th century statute by controlling or displacing private rights to surface and underground waters; for example, in 1966 all sub-surface waters were vested in the state of New South Wales. In Victoria legislation simply vested all water resources in the state in the Crown. Water users were then issued with non-assignable abstraction licences controlled by administrative law. In the later 20th century assignable water rights were developed for trade in controlled markets in an attempt to deploy market pricing to attain allocative efficiencies. The system was seen to have failed both through poor design and corrupt execution, and extensive water shortages, wasteful farming, and environmental degradation have ensued.

In ICM *Agriculture Pty Ltd v. The Commonwealth* [2009] HCA 51; (2009) 240 CLR 140, the High Court of Australia adopted the English tradition of reasonable correlative use as accurately describing riparian water claims, accepted that underground waters worked on a different regime of first capture, and further noted that it was difficult to fit conventional proprietary ideas based on possession to fluid and fugitive water assets. The Court further held that the bore and aquifer licences that displaced common-law water entitlements were not themselves objects of property, but were rather administrative controls of land use. The judges in that case gave a valuable review of the common-law doctrine of water ownership, noting its plasticity and instability.

20. *Commissioners of French Hoek v Hugo* (1885) 10 A.C. 335 (P.C.).

21. *Bill of Rights* (S. Afr.) s. 27.

22. James R. May and Erin Daly, *Global Environmental Constitutionalism* (Cambridge, 2015); David Schorr, "Water Rights," in M. Graziadei and L. Smith, eds., *Comparative Property Law: Global Perspectives* (Cheltenham, 2017) 280-289.

23. See e.g. the split decision of South Africa's Constitutional Court in *Mazibuko v City of Johannesburg* (CCT 39/09) [2009] ZACC 28, 2010 (3) BCLR 239 (CC).

Native title decisions and legislation have increasing impact on water rights in modern Australia. The *Mabo* decision referred to native claims to land based on a provable nexus between people and territory, giving rise to a title that Australian law was bound to respect unless expressly extinguished by an exercise of "sovereign power" which seems to encompass both paramount legislation and Crown executive action. A crown grant of freehold or full leasehold would extinguish a native title, as would the Crown purporting to exercise its radical title as sovereign in the manner of an owner. *Mabo* did not refer to waters as an object of native title, but the Native Title Act (Commonwealth, 1993) did include water in the interests that could be recognized, and so brought native water claims within the scheme of the legislation, which set out a scheme for identification and enforcement of native titles and where necessary for their extinguishment and reparation. In the leading case of *Western Australia v. Ward* (2002) 213 CLR 1, the High Court explored modes of proof of native customs for enjoyment of land and waters, and examined the question of whether the entry of the common law under Crown sovereignty with public rights of navigation and fishing might partially or fully extinguish native rights in waters as inconsistent, such as intertidal fishing rights. It also fell to be decided whether grant of mineral and pastoral eases necessarily cancelled native claims to land and water in the region. The majority decided that both common law general rights and specific grants had partially extinguished native land and water rights in the region. It also confined native claims to resources such as minerals to the kind of uses traditional native peoples would have enjoyed, and held that full commercial exploitation of minerals was not encompassed in a native interest.[24] In *Akiba v. Commonwealth* (2013) 250 CLR 209 the High Court followed the approach charted by Finn J in the Federal Court to find that native title to land and water was not to be assimilated to a Western model of private patrimonial claim, but were rather group rights based on reciprocity, personal obligation and spiritual nexus to the natural world.[25] It was further decided that an extrinsic legislative curb on commercial fishing did not implicitly extinguish a native title to enjoy the seas of their region, tracking *Yanner v. Eaton* (1999) 201 CLR 351 on the interaction and coexistence of general laws and native title. The Australian experience of coordinating general law with native title is tied deeply to the anthropology of Aboriginal Australia on the one hand and the legislative framework of native title recognition and extinguishment on the

24. See further Kate Stoeckel, "Western Australia v. Ward & Ors" (2003) 25(2) *Sydney Law Review* 255.

25. See further Simon Young, "The Increments of Justice: Exploring the Outer Reach of *Akiba*'s Edge towards Native Title 'Ownership'" (2019) 42 *University of New South Wales Law Journal* 825; Lauren Butterly, "Changing Tack: *Akiba* and the Way Forward for Indigenous Governance of Sea Country" (2013) 17 *Australian Indigenous Law Review* 2.

other, and may not have much bearing on other jurisdictions. But the case law does suggest that the courts are prone to save native claims as compatible with the presence of Western property ideas, precisely because native claims do not track conventional forms of Western property and are thus consistent with those forms.[26]

29. In Canada the provinces have jurisdiction over land and water resources; but the federal government has prerogative powers over other natural resources including mineral royalties, thus dividing the inheritance of Crown powers. In this complex bifurcation of authority, the law of riparian rights fell into disarray as courts in different regions issued contradictory rulings; this led to a movement towards legislative codifications from the later 19th century, displacing the web of doctrines evoked by the courts. The Western provinces passed statutes modelled on prior Australian state laws, notably Victoria, vesting all water resources, surface and underground, in the state, with allocations to private users proceeding by licence. In 1930, to iron out conflicts between provincial and federal power, an Irrigation Act was passed by the federal government to create a national common water scheme. To avoid constitutional demarcation disputes, most provinces passed the provisions of the 1930 statute into their own laws, and as a result the residual notion of a public right to water channelled through the prerogative has now been transmuted into a legislative state power.[27] The Supreme Court of Canada made clear that water rights in e.g. British Columbia thereby became pure creatures of statute.[28] It would seem that some Eastern provinces, notably Ontario, have cleaved to common law riparian concepts outside statutory allocations, based on conventional reasonable correlative use, and deploying the classical English authorities to articulate the doctrine.[29] There has been some recent discussion of how American public trust doctrines can be admitted into the state system of control, and whether trust and fiduciary ideas from private law, or "honour of the Crown" concepts from public law, can be introduced, for example to vouchsafe native or first nation interests in

26. An approach adumbrated in the seminal decision of Blackburn J in *Milirrpum v. Nabalco Pty Ltd* (1971) 17 FLR 141 (Federal Court of Australia – Northern Territory).

27. David R. Percy, "Responding to Water Scarcity in Western Canada" (2006) 83 *Texas Law Review* 2091; Jamie Benidickson, "The Evolution of Canadian Water Law and Policy: Securing Safe and Sustainable Abundance" (2017) 13 *McGill International Journal of Sustainable Development Law & Policy* 59

28. *Vaughan v. Eastern Townships Bank*, 1909 CanLII 16 (SCC).

29. *Markesteyn v. Canada*, 2000 CanLII 17160 (FC), [2001] 1 FC 345; *The Upper Ottawa Improvement Co. v. Hydro-Electric Power Commission (Ontario)*, 1961 CanLII 7 (SCC), [1961] SCR 486.

water, and generally to ensure consultation of stakeholders before water allocations are made by public authorities.[30]

In *Newfoundland and Labrador* (*Attorney General*) *v. Uashaunnuat* (*Innu of Uashat and of Mani-Utenam*) 2020 SCC 4, the Supreme Court of Canada decided that a first nation claim to protect its interests in enjoyment of land and water in one province could be litigated in the court system of another province due to the personal nexus of the defendant with the latter jurisdiction. The majority of five justices held that a native title to enjoy territorial rights including use of watercourses and instream fishing was outside the conventional *numerus clausus* of possessory real rights, and were not classifiable as personal rights either, but were to be protected as *sui generis* constitutional rights. The four dissenting justices argued that native claims including rights to enjoy water resources were better classified as "innominate real rights of enjoyment, that is, dismemberments of ownership", and hence counted as real rights for private international law even though these were not claims to exclusive possession. On either the majority or minority view, it was clear that native rights to water were cognizable, could attract a special curial protection under the honour of the Crown doctrine, and were sui generis claims that could coexist with conventional grants of land. The Supreme Court has also recently indicated that environmental legislation that interferes with the water usages of native peoples must comply with the requirement of consultation driven by the honour of the Crown.[31]

30. In other parts of the Empire, the British rulers tended to simply nationalize water resources as an override of local laws and customs. In British India, the Northern India Canal and Drainage Act of 1873 accorded the Government the "use and control for public purposes the water of all rivers and streams flowing in natural channels, and of all lakes." The Madhya Pradesh Irrigation Act, 1931 went beyond regulatory control and transferred all water resources directly into state ownership: "All rights in the water of any river, natural stream or natural drainage channel, natural lake or other natural collection of water shall vest in the Government" (s. 26). In Palestine under the British Mandate, the intricate Ottoman law of water was displaced in 1940 by an ordinance vesting all surface waters in the High Commissioner "in trust for the Government of Palestine," and giving the Commissioner powers to

30. Jane Matthews Glenn, "Crown Ownership of Water *in situ* in Common Law Canada: Public Trusts, Classical Trusts and Fiduciary Duties" (2010) 51 *Les Cahiers de droit* 493.

31. *Mikisew Cree First Nation v. Canada* (*Governor General in Council*), 2018 SCC 40, [2018] 2 S.C.R. 765, [158]; *Quebec* (*Attorney General*) *v. Moses*, 2010 SCC 17, [2010] 1 S.C.R. 557.

"supervise and control" underground waters.[32] The new Jewish state likewise subjected water to strong national direction under a Water Authority, making water allocations between individuals, industries and communities on highly political grounds. Under the shadow of British and then Israeli water law, local clan regulation of water for irrigation and consumption has continued in Palestinian villages, using a stinting mechanism of common rights restricted to a closed group of approved users. The club principle of water allocation evinced in such village organization has been analysed as a micro-model for cross border international allocation of water resources, as a third way between private and nationalized models of control.[33]

31. Water law in the Eastern United States was developed both in a series of highly articulate reserved cases[34] and in a sophisticated treatise literature,[35] and established a correlative use metric for in-stream water uses, and a free capture rule for underground and indefinite water users, well before English law stabilized around the same doctrines. In *Tyler v. Wilkinson* (1827) Justice Story produced a carefully specified structure of natural rights varied by rights of grant and prescription, and tied to estates so as to restrict assignment, synthesizing the large body of extant English and American authorities into an integrated whole. His judgment was printed *in extenso* in Charles Gale's seminal *Treatise on the Law of Easements*,[36] and also adopted as high authority in English cases.[37] Prof Carol M. Rose in a seminal study of the evolution of 19th century water law[38] has surmised that Story's approach was

32. Palestine (Amendment) Order in Council (1940) Article 16E, discussed in David Schorr, "Water law in British-ruled Palestine" (2014) 6 *Water History* 247 and David Schorr, "Horizontal and vertical influences in colonial legal transplantation: Water by-laws in British Palestine" (2021) 61 *American Journal of Legal History* 308.

33. Eyal Benvenisti, "Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law" (1996) 90 *American Journal of International Law* 384; Eyal Benvenisti, "The Legal Framework of Joint Management Institutions for Transboundary Water Resources: Ancient Practices Informing Contemporary Regional Cooperation," in *Water and Sustainable Development* (Bristol, 2005) 21.

34. Notably Story J's judgment in *Tyler v. Wilkinson* (1827) 4 Mason (U.S.) 397; 24 Fed. Cas. 472 (Case No. 14,312).

35. Notably J. K. Angell, A *Treatise on the Law of Watercourses* (3rd ed, Boston MA, 1840).

36. Gale, above n. 14, 130-131.

37. E.g. *Acton v. Blundell* (1843) 12 M. & W. 324; 152 E.R. 1223 (Ex. Ch.).

38. Carol M. Rose, "Energy and Efficiency in the Realignment of Common Law Water Rights" (1990) 19 *Journal of Legal Studies* 261, reprinted in

guided by the need to ensure predictable supplies of hydro power to the mills of New England, and that a similar economic function may have recommended the Story doctrine to English judges guiding disputes between factory owners, farmers, and miners in the industrial regions.

32. Water law in the Western United States took a different course in the later 19th century, adopting the "Colorado" doctrine according water rights to occupants of land who had made the prior appropriation of waters and put them to present use. There was under this doctrine no duty to accord reciprocal rights to adjacent owners; it was a rule of capture on a first come first served basis.[39] The doctrine seemed to fit with the mentality of settlers on the frontier, farmers and prospectors, who believed that enterprise and the bringing of resources into productive use was the root of property, and that a virtual occupation of water should give a protected interest just as occupation of unoccupied land conferred a good title.[40] It has also been surmised that the Colorado doctrine was appropriate to the economy: in the dry West water stocks were low and flows were diverted for consumptive uses (domestic, farming and mining) rather than for industrial flows such as power and production as in the Eastern states. Another hypothesis is that the doctrine appealed to homesteaders seeking independence and self-earned prosperity in an egalitarian frontier society. The rule was also anti-market and anti-monopolistic, as a prior appropriation could not give title to a potential use, nor licence transfer to a non-appropriating non-landed assignee. It was a usufructuary, use-it-or-lose-it doctrine, and so prevented build ups of water capital and market pricing of water stocks. The Colorado doctrine also built on a heretical stream in English water law, rewarding prior appropriation through protections of tort remedy. This doctrine was evoked by Blackstone in his *Commentaries* and also by a stream of 18th and early 19th century English cases.[41] It may be that the English prior appropriation doctrine was really about fixing the correct level of damage caused by interferences in natural flow, and was not meant to construct an alternative structure of property rights in water; but the American judges promoting the Colorado doctrine self-consciously broke with English and Eastern-U.S. legal traditions and decided on a fresh path.

C. M. Rose, *Property and Persuasion* (Boulder CO, 1994) 163, discussed in Getzler, above n. 1, 336-342.

39. Established in *Coffin v. Left Hand Ditch Co.* (1882) 6 Colo 443 (Colorado Supreme Court).

40. See the definitive study by David Schorr, *The Colorado Doctrine: Water Rights, Corporations, and Distributive Justice on the American Frontier*, above n. 1.

41. Detailed analysis of the rise and fall of the Blackstonian prior appropriation theory in the English courts is laid out in Getzler, above n. 1, 153-232.

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33. The Western prior appropriation doctrine may have had an egalitarian edge, supporting small-scale farmers and restraining concentrations and commodification of water resources, but it also had the effect of blocking more efficient industrial and urban uses requiring capital intensification and longer term planning. After many decades of doctrinal instability, California moved to a hybrid system with reasonable correlative allocations of both surface and ground water, but with prior appropriation used to delimit the scope of interests. Many Western states therefore displaced the common law pattern with legislative overlays; but state control of water could lead to fresh problems of misallocation to favoured interests. American water law has also been marked by protracted intergovernmental conflict over cross-border water flows, notably in the Colorado river basin that feeds the states of Arizona, California, Nevada, Colorado, Utah, New Mexico, and Wyoming. The Colorado River Compact of 1922 was negotiated between federal and state governments to create a form to negotiate pooled water resources, and this made possible the construction of vast projects for damming and channeling from the late 1920s including the Hoover Dam. The cooperation is unstable, however, and the problem of a rule-bound and accepted system interstate water allocation is not constitutionally solved.

34. The federal government has also historically intervened in state water rights to protect the viability of native reserves. The Supreme Court case of *Winters v. United States*, 207 U.S. 564 (1908) held that the federal government had a responsibility as part of its treaty-making with native peoples constituting protected reserves to ensure due availability of water resources so to maintain native agriculture and lifestyles. This translated into a federal power–and duty–to defeat inconsistent state appropriation (including appropriation by private actors) of waters that should be accorded to native peoples for their just and reasonable use on reserved lands. Thus, native water interests, conceived as claims contiguous to or running with native lands, take priority over state water abstractions. A large body of case law, mainly from Arizona, Nevada, Colorado and Montana, has explored how to measure reasonable water supply for native reserved acreage, and how to balance inter-state rivalries over water distribution as well as federal and native interests. It must be emphasized that here the native claim to water is linked to the Federal treaties vouchsafing reserved lands, as an implicit promise to make the land grants viable. This does not amount to recognition of a collective title or control over territorial freshwater by virtue of native customary law. It is an incident of land control and occupation on the native reserves.

35. We may conclude this survey of common-law water regimes with some of the most interesting and innovative of the once-colonial jurisdictions. The historical New Zealand law of water has been entwined with the evolution of native title and self-rule as a co-jural system of laws alongside

sovereign Crown common law and parliamentary legislative authority.[42] The common law of water has now been largely subsumed by statute, as under the Resource Management Act 1991. The legislation provides a complex stinting mechanism between various usages, to be determined after due consultations. The public law regulation of water under this regime was analysed in court proceedings recently in *Aotearoa Water Action Incorporated v. Canterbury Regional Council* [2020] NZHC 1625. Much of the attention of the courts is now absorbed by two distinct but linked issues: First Nation water claims in the context of Treaty of Waitangi principles,[43] and a general crisis of water quality for inland waters provoked by over-exploitation of land and water by farmers, miners, and city dwellers (including both Maori and Pakeha actors). The crisis of pollution and competition for supply by various groupings in New Zealand might be seen to be a microcosm for the problems of legally-governed water management the world over.

One innovative approach developed in recent New Zealand law has been to recognize water bodies as legal persons, as in a famous statute of 2017 which granted the Whanguani River capacity and standing to bring claims to court in its own defence via human representatives.[44] This development, constituting rivers as legal persons with a naturalistic interest distinct from those of human users or actors, has excited environmental activists the world over, and has been echoed, *inter alia*, in India[45] and

42. The seminal case of *Tamihana Korokai v. Solicitor-General* (1912) 32 NZLR 321 lies at the heart of these issues: see further Mark Hickford, "John Salmond and Native Title in New Zealand: Developing a Crown Theory on the Treaty of Waitangi, 1910-1920" (2007) 38 *Victoria University of Wellington Law Review* 853.

43. See e.g. Marlene Thomsen, "Recent Waitangi Tribunal River Reports and Implications for the ECNZ Split" (2000) 9 *Auckland University Law Review* 208; Waitangi Tribunal, *Stage 1 & 2 Reports on the National Freshwater and Geothermal Resources Claim* (Wai 2358, 2012, 2019); Jacinta Ruru, "Māori rights in water – the Waitangi Tribunal's interim report" [2012:9] *Maori Law Review*.

44. Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 s 14(1): "Te Awa Tupua is a legal person and has all the rights, powers, duties, and liabilities of a legal person."

45. *Mohd Salim v. State of Uttarakhand* (2017) SCC Online UTT 367, para 19 per Sharma and Singh JJ) para 19: "Accordingly, while exercising the *parens patrie* jurisdiction, the Rivers Ganga and Yamuna, all their tributaries, streams, every natural water flowing with flow continuously or intermittently of these rivers, are declared as juristic/legal persons/living entities having the status of a legal person with all corresponding rights, duties and liabilities of a living person in order to preserve and conserve river Ganga and Yamuna." The same court extended the doctrine to other water bodies in *Lalit Miglani v. State of Uttarakhand* (2017) SCC Online UTT 392. Both rulings were however stayed by

Bangladesh.[46] But the personalization of rivers is hardly a panacea, and with the surface waters of these jurisdictions badly compromised by pollution, the flow of litigation through the courts shows no sign of abating.[47] The lesson may be that ultimately the environmental protection of natural water systems from over-extraction and pollution will have to be evolved in the political rather than the legal sphere, though strategic litigation and specific legislative interventions can play a role in driving the political process.

36. The deeper reasons why law constantly fails to solve the problems of water allocation and protection were analysed with great prescience by the American jurist Lon L. Fuller in the mid-20th century. Fuller, who attained fame in the fifties and sixties as a natural law philosopher at Harvard, grew up in water-scarce southern California, dependent on long-distance water carriers and elaborate hydrological infrastructure to maintain itself. Fuller investigated the basic problems of water law in a 1965 article entitled "Irrigation and Tyranny,"[48] where he wrote:

> The earliest decisions in England in the field we now call administrative law related to similar questions. . . . We may indeed describe the law relating to the control of waters as the most ancient branch of administrative law. . . . When things go wrong we are more and more inclined to run to the judge. This is . . . an escapist solution. Problems concerned with the sharing of water supplies and the joint utilization of river systems are inherently unsuited to adjudicative solution, involving as they do a complex interplay of diverse interests. Only those who know those interests intimately, who can feel their way toward the best reciprocal adjustment of them, are competent to find a truly satisfactory solution.

Fuller went on to develop this into a general theory of "polycentric" interest balancing, published in an influential posthumous article in 1978.[49]

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the Supreme Court of India within weeks of the original decisions: *State of Uttarakhand v. Mohd Salim* (2017) SCC Online SC 903; SLP (Civil) 33968 of 2017.

46. *Nishat Jute Mills Limited v Human Rights and Peace for Bangladesh* (Appeal 3039), Supreme Court of Bangladesh Appellate Division, 17th February 2020, affirming judgment of the Supreme Court of Bangladesh High Court Division, 31st January 2019.

47. See e.g. *Smith v. Fonterra Co-operative Group Ltd.* [2021] NZCA 552; [2022] 2 NZLR 284; *Timaru District Council v. Minister of Local Government* [2023] NZHC 244; Shyam Divan and Armin Rosencranz, *Environmental Law and Policy in India* (Oxford, 2022) 228-314.

48. (1965) 17 *Stanford Law Review* 1021, 1041-1042.

49. Lon L. Fuller, "The Forms and Limits of Adjudication" (1978) 92 *Harvard Law Review* 353.

In a sense, he was drawing out of water law a general insight that rights-talk and competitive bilateral adjudication is a poor method of constructing systemic order, an insight now better understood in an era of environmental and financial interconnectedness and fragility.[50]

37. The leading property and tort scholar Richard Epstein has written extensively on water law; his theorizing is eclectic and does not cleave to the libertarian Chicago school that he is associated with. Epstein thought it plausible for the courts to assume a veiled administrative power over surface waters via the reasonable use doctrine, preserving a guided discretion in the system. He writes:

> Flowing water is a valuable resource for which there is no obvious single owner. Assuming, as was the case historically, that the Crown or the state does not own these rights . . . then there must be some natural mode of acquisition that matches claims to water with individual owners.[51]

Epstein argues that first possession, as applied to the case of wild animals, was an unacceptable regime for instream water as it would divide and destroy the river as a "going concern" for all participants. Nor are market solutions more promising: *pace* Coase,[52] this is not an area where owners the law can simply define initial entitlements and then encourage dynamic trading to sort out allocations via pricing and arbitrage. Transactions costs and predatory bargaining in an inherently polycentric environment will inevitably lead to hold-outs, squeeze-outs, monopolies, underinvestment, and systemic

Richard Epstein speaks at a conference on the Gridlock Economy, at George Mason University, 2009. Photo by Kat Walsh, CC BY-SA 3.0.

50. See Henry E. Smith, "Property as Complex Interaction" (2017) 13 *Journal of Institutional Economics* 809; Henry E. Smith, "Semicommons in Fluid Resources" (2016) 20 *Marquette Intellectual Property Law Review* 195; Henry E. Smith, "Governing Water: The Semicommons of Fluid Property Rights" (2008) 50 *Arizona Law Review* 445.

51. Richard A. Epstein, "On the Optimal Mix of Private and Common Property" (1994) 11 *Social Philosophy and Policy* 17, extracted in R. A. Epstein, ed, *Liberty, Property, and the Law*, Vol. III, *Private and Common Property* (New York, 2000) 357; and see further Epstein, "Why Restrain Alienation?" (1985) 85 *Columbia Law Review* 970, 979–82.

52. Ronald H Coase, *The Firm, The Market, and the Law* (Chicago, 1990).

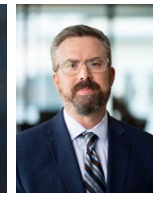
collapse.[53] The solution, argues Epstein, is to allow water use only to riparians or analogous actors, thus forming a closed common pool, and then allow each riparian a fair and reasonable use only, policed by legal actions driven by a generous rule of standing. Alienation of water rights should be possible only through alienation of riparian land. This was an efficient market for water entitlements, because a person valuing the water rights highly enough would pay for riparian land, and at the same time would be restrained from unstinted consumption by the legal norm that user should be proportionate to land ownership. "By so providing," argues Epstein, "the law necessarily made the river into a common pool asset owned by a group of individuals who did not stand in a consensual relationship one to another." The reasonable use test can then be adjusted to permit a hierarchy of uses, domestic, agricultural, and commercial.

Epstein's theory is a convincing articulation of some of the policy ideas implicit in riparian water law; but it does not explain how the law sets reasonable use levels. This is the bedeviling detail that has prompted so much litigation across the centuries. Epstein asserts blankly that legal rules of thumb are no worse than administrative solutions, which have the disadvantage of being prone to distortion by interest groups. The ultimate solution revealed in the history of water law is for the courts to supervise the bargaining strategies of parties involved in the common pool of water assets, and enforce good faith bargaining and forbearance by all participants in the common pool to help them reach optimal results. The state or the Crown as a dominant player in water markets and asset pools, will have its own water needs and will also wield governmental and constitutive power over the water allocation mechanisms binding others. The challenge of water law is to guide the state to act in good faith, with a careful awareness of the fragility of common pool allocations, ensuring that all parties are heard and all interests properly weighed as the common pool is stinted.[54] Doctrines such as the public trust, the honour of the Crown, and the general tools of administrative law and judicial review of executive action, can assist by adding rigour and clarity in the exercise of governmental power, and so help the parties evolve their own optimal and consensual solutions. There is a rich history of common-law doctrinal experimentation to draw from, as these pages of comparative legal history have shown.

53. See further Joseph W. Dellapenna, "The Importance of Getting Names Right: The Myth of Markets for Water" (2000-2001) 25 *William & Mary Environmental Law and Policy Review* 317.

54. The work of the behavioural economist Elinor Ostrom on common pool regulation is here essential reading: Elinor Ostrom, *Governing the Commons. The Evolution of Institutions for Collective Action* (Cambridge, 1990); Elinor Ostrom, "Community and the Endogenous Solution of Commons Problems" (1992) 4 *Journal of Theoretical Politics* 343.

Senator Jon Kyl,[*] *Ryan Smith,*[**] *and John Weldon*[***]


THE McCARRAN AMENDMENT, THE SAN CARLOS APACHE, AND TRIBAL WATER RIGHTS

Introduction

Indian water rights have a long and complicated history in the West, shaped by various Supreme Court rulings, state case law, and federal statutes. One case of particular importance is *Arizona v. San Carlos Apache Tribe of Arizona*, 463 U.S. 545 (1983), which held that a state adjudication proceeding is a proper forum to adjudicate Indian water rights held in trust by the United States. It is fitting, therefore, that the impact of that case on Indian water rights be examined on its 40th anniversary.

As discussed in more detail below, one likely result of *San Carlos Apache* is that it spurred water rights settlement discussions between the tribes and non-Indian parties. Those settlement discussions, in turn, resulted in a significant number of congressionally approved Indian water settlements. Under this model, tribes receive federal and state funding to finally put their water to use and the non-Indian parties and the United States receive certainty in the form of the quantification of tribal water rights as well as waivers of claims for additional water rights and past damage claims. Because of the mutually

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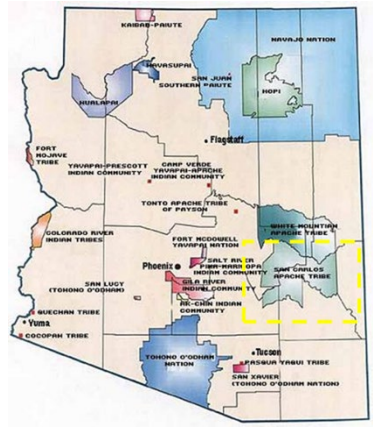
[*] Before serving 26 years in the U.S. Congress, Jon Kyl practiced law in Phoenix, AZ, working on water law issues, among others. In the U.S. Senate, he helped secure passage of water settlements involving Arizona Indian tribes, the federal government and State parties. He currently serves as a Director of the Kyl Water Center at Arizona State University.

[**] Ryan Smith is a shareholder at Brownstein Hyatt Farber Schreck and Co-Chair of Brownstein's Natural Resources Department where his practice focuses on Indian water settlements and Western water. Before joining Brownstein, Ryan served as a legislative advisor to Senator Jon Kyl (R-AZ) on water and tribal issues.

[***] John Weldon is a founding partner at Salmon, Lewis & Weldon, P.L.C. in Phoenix, Arizona. While a partner with Senator Kyl at Jennings, Strouss & Salmon in Phoenix in 1983 he assisted Senator Kyl with the briefing and preparation for argument before the United States Supreme Court in *Arizona v. San Carlos Apache Tribe*.

beneficial structure of the settlements, they have become the preferred approach for how to resolve tribal water claims. The settlement model also has proven more practical given the limits on the courts' authority to award funding for tribal water related projects. Although *San Carlos Apache* may not have directly led to these settlements, it arguably was a catalyst, nudging the parties to find mutually beneficial solutions of their own making.



Reservations in Arizona, with the San Carlos Apache Reservation circled in the lower right hand corner. Map courtesy of AAA Native Arts.

Tribal Water Rights: Background

Tribal water rights are based on the *Winters* doctrine, which provides that when the federal government creates an Indian reservation, it also reserves sufficient water to fulfill the purpose of the reservation. *Winters v.* U.S., 207 U.S. 564 (1908). The priority date is the date the reservation was established, *Cappaert v.* U.S., 426 U.S. 128, 138 (1976), and *Winters* rights cannot be lost due to non-use. *Hackford v. Babbitt*, 14 F.3d 1457, 1461 n. 3 (10th Cir. 1994).

Tribal water rights are further complicated by scarcity of water in the West and the doctrine of prior appropriation, which provides that the priority of water rights is established at the time water is to put to beneficial use or when a state administrative filing is made. *See* W. *Maricopa Combine, Inc. v. Ariz. Dep't of Water Res.*, 26 P.3d 1171, 1178 (Ariz. Ct. App. 2001) ("Arizona has always followed the prior appropriation doctrine in an attempt to deal with the scarcity of water."); *see e.g.* ARIZ. REV. STAT. ANN. § 45-141(B). Because many of the tribal reservations were created in the 1800's and early 1900's, a significant number of tribes have water rights senior to non-Indian water users in the West. However, few of these reservations were able to utilize these water rights for a variety of reasons. These relatively early priority dates have caused tension between tribes desiring to develop their water uses and non-Indian water users, especially considering the limited supply of water in the arid western United States. The problem has been exacerbated because tribes often do not have the necessary funding to put their water to use and non-Indian communities have become reliant on water that is subject to significant tribal claims.

Despite being decided in early 1908, *Winters* litigation was largely inactive until the 1963 decision in *State of Arizona v. State of California*, 373 U.S. 546 (1963). In *Arizona v. California*, the Court further clarified the quantity of water intended to be reserved by the United States under the *Winters* Doctrine by noting that the only feasible and fair way which to quantify reserved water for reservations is by irrigable acreage. *State of Ariz.*, 373 U.S. at 601 ("We have

concluded, as did the Master, that the only feasible and fair way by which reserved water for the reservations can be measured is irrigable acreage. The various acreages of irrigable land which the Master found to be on the different reservations we find to be reasonable.") More specifically, the Court found that the quantity of water reserved was the amount necessary to satisfy the future as well as the present needs of the Indian reservations, and enough water was reserved to irrigate all the practicably irrigable acreage on the reservations. *State of Ariz.*, 373 U.S. at 600.[1]

The decision in *Arizona v. California*, coupled with its quantification standard and awarded quantities in the decision, drew the attention of the Salt River Project (SRP), a major water provider to metropolitan Phoenix, as well as other major water users throughout the West. Because of the potential for competition for a limited resource already being fully utilized, SRP made several unsuccessful attempts to settle various tribal claims to the Salt River system in Arizona in the early 1980s. Momentum changed, however, with the Supreme Court's ruling in *Arizona v. San Carlos Apache Tribe of Arizona*, 463 U.S. 545 (1983). That decision, coupled with the *Winters* and *Arizona v. California* decisions, prompted various settlement discussions. Those negotiations were further motivated by the lessons learned in the *Wind River* litigation in Wyoming, where the subject tribes prevailed at trial but failed to receive the necessary funding to put their water to use.

The Significance of *Arizona v. San Carlos Apache Tribe of Arizona*

In *San Carlos Apache*—which co-author Senator Jon Kyl argued on behalf of the petitioners before the Supreme Court—the question before the Court was whether concurrent federal suits brought by Indian tribes to adjudicate their tribal water claims were subject to dismissal where states had initiated state court proceedings to adjudicate such rights. With respect to the Arizona cases in *San Carlos Apache,* several Indian tribes filed a series of suits in the United States District Court for the District of Arizona, asking removal of the state adjudications to federal court, preventing any further adjudication of their rights in state court.

1. The Arizona Supreme Court has adopted a different measure of tribal water rights. *In re Gen. Adjudication of All Rts. to Use Water in Gila River Sys. & Source*, 35 P.3d 68, 79 (Ariz. 2001) (*Gila V*), rejected the PIA standard discussed in *Arizona v. California*, as the exclusive quantification measure for determining water rights on Indian lands.

The Court noted that the McCarran Amendment[2], as interpretated in *Colorado River Conservation District v.* U.S., 424 U.S. 800 (1976), "allows and encourages state courts to undertake the task of quantifying Indian water rights in the course of comprehensive water adjudications." *San Carlos Apache Tribe*, 463 U.S. at 569. It further noted that "[a]lthough adjudication of those rights in federal court instead might in the abstract be practical, and even wise, it will be neither practical nor wise as long as it creates the possibility of duplicative litigation, tension and controversy between the federal and state forums, hurried and pressured decision-making, and confusion over the disposition of property rights." *Id.* As a result, the Court held that, assuming that the state adjudications are adequate to quantify the rights at issue in the relevant federal suits, the "expertise and administrative machinery available to the state courts, the infancy of the federal suits, the general judicial bias against piecemeal litigation, and the convenience of the parties, we must conclude that the District Courts were correct in deferring to the state proceedings." *Id.* at 570.

In 1985, the Arizona Supreme Court in U.S. *v. Superior Court In and for Maricopa County*, 697 P.2d 658 (Ariz. 1985), resolved a state law jurisdiction issue left open by *San Carlos Apache*, holding that the Arizona state constitution did not create an impediment to a general adjudication of tribal water claims in state court. This decision resolved any doubts that the Arizona state court was going to proceed with the two adjudications to address tribal and other federal water claims, as well as the competing non-Indian claims.

The challenge with adjudications is the tremendous amount of time and resources it takes to determine the extent and priority of all water rights in an any given river system. For example, the initial claim deadline for the Gila River Adjudication in the State of Arizona was 1988. When initiated, the thought was that it would be completed in approximately 10 years. Next year, it will be 50 years since the initiation of the Salt River petition starting the Gila Adjudication.

A significant challenge with litigation is that does not deliver wet water to the tribes. In other words, even if a tribe is successful in an adjudication in asserting its claims, it does not mean that the tribe will have the necessary infrastructure funding to put that water to use. The best example of this can be found with the Wind River Tribes (Eastern Shoshone and Northern Arapaho). In 1988, the Supreme Court of Wyoming in the *Big Horn* case applied the reserved rights doctrine to find the Wind River tribes entitled to nearly half a million acre-feet of water. *In re Gen. Adjudication of All Rts. to Use Water in the Big Horn River Sys.*, 753 P.2d 76 (Wyo. 1988) (*abrogated on other grounds by Vaughn v. State*, 962 P.2d 149 (Wyo. 1998)). Litigation ultimately only provided a hollow

2. The McCarren Amendment enacted in 1952 waived federal sovereign immunity for the joinder of the United States as a defendant in general stream adjudications. 43 U.S.C. § 666.

victory for the tribes. Indeed, although they were awarded a substantial quantity of water, no money was awarded to put their water to use.

The tribes' experience in *Wind River* may have caused some Arizona tribes to rethink the benefits of litigating their claims. These decisions along with the pending state court litigation prompted settlement discussions among various Indian and non-Indian parties. For instance, within a couple of years after the *San Carlos Apache* decision, SRP approached the Salt River Pima-Maricopa Indian Community and the Ft. McDowell Indian Community to open settlement discussions. Those discussions proved to be fruitful, resulting in two congressionally approved settlements: the Salt River Pima-Maricopa Indian Community Water Rights Settlement Act of 1988, Pub. L. 100-512, 102 Stat. 2549 (1988) and Fort McDowell Indian Community Water Rights Settlement Act of 1990, Pub. L. 101-628, Title IV, 104 Stat. 4480 (1990). The success of those negotiations encouraged other tribes to start discussions with SRP and/or other state parties, leading to water settlements with the following additional Arizona tribes: Gila River Indian Community, the Tohono O'odham Nation, San Carlos Apache Tribe, the Yavapai-Prescott Indian Tribe, the Zuni Tribe, the White Mountain Apache Tribe, and the Hualapai Nation. Many other tribes throughout the West also have settled their claims. All told, Congress has approved 35 Indian water settlements as of this writing.

Although there currently is quite a long list of settlements, they did not come easy. Indeed, each settlement literally requires an act of Congress. Such approval is required because each settlement almost always authorizes federal funding for infrastructure projects for tribes to put their water to use. In addition, Congress is required to approve any Indian water settlement under the Non-Intercourse Act, 25 U.S.C. § 177, which requires congressional approval of any alienation of an Indian tribe's land and arguably water.

Moreover, because the legislation approving the settlements was state specific, it required a tremendous amount of work by the settling parties' congressional delegation. Specifically, it required a member in the delegation to champion the legislation and devote an inordinate amount of personal time, effort, and political capital to advance any one settlement. With respect to the Arizona settlements, Senator Kyl, a former water attorney, undertook the lead in pursuing the legislation. During his tenure in office, he was able to usher through Congress a number of Indian water settlements, including the Arizona Water Settlements Act and the White Mountain Apache Tribe Water Rights Quantification Act, which settled the claims of the Gila River Indian Community, the majority of the claims of the Tohono O'odham Nation and the White Mountain Apache Tribe respectively.

Although each Indian water settlement is unique, the general model of the settlements is that the tribe agrees to quantify its water rights for an amount less than its water right claims and waives its water-related claims against the United States and state parties. In consideration for those concessions and waivers, the tribe receives federal (and frequently state funding) for water-related infrastructure, which enables the tribe to put its water to use.

The model has proven to be successful. The settlements provide certainty to all water users and wet water in the form of funding for water-related projects for tribes. Tribes often receive hundreds of millions of dollars—and in some cases more—for water-related infrastructure to settle their claims. This point is crucial. Many tribes, especially in Arizona and the Southwest, lack the infrastructure to put their water to use, and often are plagued with inadequate drinking water systems. Settlements provide a mechanism to not only settle the tribe's claims, but address the water needs of its people. The settlement model is also preferrable because of Congress's ability to authorize funding for the tribal water projects, whereas the courts have limited authority to award such funding. Finally, since all impacted parties must agree to the terms of an Indian water settlement, they are necessarily structured so that they work for all settlement parties, giving all parties input on how to manage their water in the future. As in the case of Arizona, the settlements have built trust, relationships, and future partnerships among the settlement parties.

Conclusion

Although the impact of the *San Carlos Apache* on tribal claims is not entirely clear, it is fair to say that the number of tribal claims settled after the decision suggests that it did facilitate their settlement. Ultimately, it is for the tribes to determine whether they have benefitted from the settlements, but the settlements have brought significant financial resources to the tribes to put their water to use, and at least in Arizona, have forged partnerships that have lasted decades.

Amorina Lee-Martinez, PhD[*]

COLONIAL LAND APPROPRIATION AND PRIOR APPROPRIATION HAVE LIMITED WATER ACCESS FOR INDIGENOUS PEOPLE

Land Acknowledgement

I acknowledge that the land where I live and within which I have conducted my research in the Four Corners region is the present and ancestral homelands of Pueblo, Ute, Paiute, Diné, and Jicarilla Apache people.

In this article, I name harsh actions which have occurred in the history of Colorado and the Four Corners.

> Had educators before us taken on the difficult task of adding conquest history to Colorado history curriculum we would be more at ease in discussing these historical phenomena and less daunted by the historical subject matter of coercion. Coercion is a means of controlling the conduct of others through threats to harm. Coercive relationships exist everywhere in every society: in families, in the marketplace, and characteristically, in political situations. The history of civilization is a history of war with victors and victims of differing cultures across time and place. Many people are understandably apprehensive to speak of the consequences for American Indians in the creation of the United States. It is common to go through a period of discomfort and adjustment to

[*] Amorina Lee-Martinez completed her PhD in Environmental Studies at the University of Colorado Boulder in July 2022. A native of the Four Corners region of Southwest Colorado, Amorina's long-term goal is to be involved in her home-community efforts to sustain water resources for multiple needs, and to help prepare for increasingly arid conditions in the Dolores River region. Her historical investigation aims to inform how to create a sustainable future for water management in the headwaters of the Colorado River.

discussing difficult topics related to our history. Blame and guilt are not useful. Compassion and understanding are essential.[1]

Prior Appropriation and Indigenous Land Appropriation

For over 100 years, the Colorado River Compact has limited Tribal access to water at the same time that it opened access to water for many European-Americans.

Colorado citizens voted to establish Colorado statehood in 1876, fifteen years after Colorado became a U.S. territory following gold rushes in the Eastern Rockies. Incorporated into the Colorado Constitution was the new system of water allocation, Prior Appropriation, with policies informed by the Protestant ethos of law embedded within U.S. governance to remove and/or eradicate Indigenous peoples to make way for White newcomers in order to make the land "productive" through extraction and agriculture.[2]

Conquest of Indigenous peoples and of natural resources are intertwined in U.S. history. Indigenous land cessions were also cessions of water and other natural resources. At the time the Prior Appropriation Doctrine was developed, the definition of beneficial uses of water was limited to mining, agriculture, and domestic needs. Prior Appropriation created a structure that allowed American settlers to claim land and make it viable for new towns and for homestead agricultural operations without being constrained to the people already present or the natural limitations of the landscape. Through this system of allocation, human uses would be prioritized over river habitats and wildlife, and White people's water uses would be prioritized over that of Indigenous people and other people of color—fundamentally shaping water management in the West into the system we are embedded within today.[3]

Nearly fifty years after Colorado established Prior Appropriation as a system of water allocation, representatives of the seven Colorado River Basin States signed the Colorado River Compact into law November 24, 1922, which codified water use of each state within this prior appropriation structure. The Compact similarly prioritized human needs over the environment and White human needs over that of other humans. Case in point: The Compact only

1. C. Martinez, San Juan School District (SJSC), Cultural Literacy Social Studies Curriculum. K-12 Scope and Sequence. Blanding, Utah: San Juan School District (2004).

2. C. A. Martinez, *Out of Control: Resistance and Compliance in the Fight to Conserve Diversity in an Indian Education Program*, DOCTORAL DISSERTATION SUBMITTED UNIVERSITY OF ARIZONA (2003).

3. A. Lee-Martinez, *What's Beneath the Surface Tension? A Case Study of Changing Populations and Watershed Management in the Dolores River Region, Colorado*, DOCTORAL THESIS SUBMITTED UNIVERSITY OF ARIZONA (2022).

mentions Tribes once and with one sentence: "Nothing in this compact shall be construed as effecting the rights of Indian tribes."[4]

According to historian Norris Hundley, Jr., when the representatives of the seven basin states and federal government had nearly reached settlement on the Compact, they addressed some of the "lesser questions" such as the issue of "the Indian."[5] Hundley continues: "No attempt was made to discover how many Indians were in the basin or what their water needs were. The [Compact] commission simply assumed that the water rights of Indians were 'negligible.' Still, since the federal government had Treaties with Indians," Colorado River Commission President Herbert "Hoover believed that it would be unwise to ignore the Indians' rights—whatever they might be," resulting in the "Indian article" above.[6]

Margaret D. Jacobs (2021) offers a useful explanation for why Indigenous people were treated as an afterthought in the Colorado Compact negotiations and how there exist inequalities between Indigenous and White Americans at present:

> …unless you are an American Indian or Alaska Native, you are living on stolen land. The theft may have happened a long time ago and been carried out by others, but most of us are nevertheless still trespassers. And we are also ongoing beneficiaries of this theft. Even though we rarely admit it, I*ndian dispossession and removal opened up new possibilities and prospects for settlers, even as it foreclosed so many opportunities for* I*ndigenous people*. (emphasis added).[7]

In essence, the land and water systems we live within today were made possible by foreclosing opportunities for Indigenous people. By legally divvying up water and directing funds toward water projects in the Colorado River Basin, the Compact is foundational to what Patty Limerick has called "The Era of Improbable Comfort Made Possible by a Taken-for-Granted but Truly Astonishing Infrastructure," where we who depend on the Colorado River Basin don't have to think about where our abundant and good quality water

4. N. Hundley, WATER AND THE WEST: THE COLORADO RIVER COMPACT AND THE POLITICS OF WATER IN THE AMERICAN WEST (2d ed.), University of California Press (Berkeley, CA, 2009), p. 212.

5. I*d*. at 210-11.

6. I*d*.

7. M. Jacobs, AFTER ONE HUNDRED WINTERS: IN SEARCH OF RECONCILIATION ON AMERICA'S STOLEN LANDS, Princeton University Press (Princeton, NJ, 2021), p. 17.

comes from, we just open the tap or spigot because the "truly astonishing" large-scale infrastructure that dams and diverts water is hiding in plain sight.[8]

Indigenous people have largely been excluded from this experience of "improbable comfort" and overall cannot take water infrastructure for granted because U.S. water projects have been directed toward European-American settlements. In the United States, Indigenous households are 19 times more likely than White households to lack indoor plumbing. And 48% of Tribal homes don't have access to reliable water sources.[9] Lack of water infrastructure and good quality water increases costs and time spent for acquiring water, increases rates of infectious disease and prevents economic development. These conditions are a systemic problem for Indian Reservations and for communities of color such as Flint, Michigan whose government has yet to address the poisonous lead water infrastructure there.

The history of United States colonialism provides insight into why Indigenous people have been excluded from opportunities and resources that most White and/or wealthy folks take for granted. I discuss this topic of

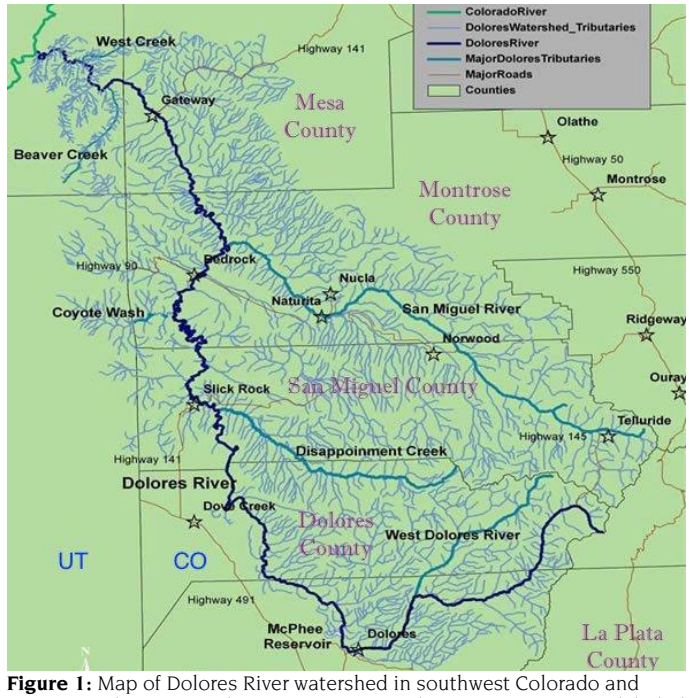


Figure 1: Map of Dolores River watershed in southwest Colorado and Eastern Utah. Note McPhee Reservoir center bottom. Counties are labeled in purple and states are labeled in blue. State and county labels added by author. Image source: https///i0.wp.com/

8. P. Nelson Limerick & J.L. Hanson, A DITCH IN TIME: THE CITY, THE WEST, AND WATER, Fulcrum Publishing (Golden, CO, 2012).

9. Tribal Clean Water Act, UNIVERSAL ACCESS TO CLEAN WATER FOR TRIBAL COMMUNITIES (2022), available at https://tribalcleanwater.org/.

Indigenous rights and water management in the Colorado River Basin by focusing on one tributary and one Tribe within the Colorado River Basin—The Dolores River and the Ute Mountain Ute Tribe in southwestern Colorado, which is part of the Four Corners region, the only place in the U.S. where four states (AZ, UT, CO, NM) meet at one point (See **Figure 1**).

The Dolores Project

The Bureau of Reclamation's Dolores Project includes McPhee Dam and Reservoir and its diversions from the Dolores River watershed to the neighboring San Juan River watershed. McPhee Dam is the third largest reservoir in Colorado.[10] The Dolores River flows 241 miles and drops about 10,000 feet from its headwaters in the San Juan Mountains in southwest Colorado to its confluence with the Colorado River near Moab, Utah.[11] The river flows southwest as it drops out of the San Juans and then makes an abrupt turn northward at the town of Dolores, Colorado. McPhee Dam is located ten miles downstream from the town of Dolores.[12] Importantly, the Dolores Project satisfies Ute Mountain Ute Reserved water rights. The Project's associated dam and diversions were dreamed up and made possible by the legacy of conquest, but McPhee Dam would not have been fully funded and completed if the Colorado Utes did not advocate for securing reserved water rights to their arid reservation lands in the southwest corner of Montezuma County. The process through which the Colorado Utes negotiated access to Dolores Project water resulted in the 1988 Colorado Ute Indian Water Rights Settlement Act, which I will discuss in more detail later in this article.

In 2021, McPhee Reservoir faced its driest and warmest year on record since it was built in 1986, requiring its managers for the first time to dredge a channel within the reservoir to capture low water levels in its delivery canals, and causing some users, including the Ute Mountain Ute Tribe, to receive as little as 10% of their water allocations.[13] In 2022, conditions were slightly

10. R. Todea, *Ute Mountain Ute Tribe Faces Another Devastating Drought Year, But Recent Rain, Wheat Prices Bring Hope*, WATER EDUCATION COLORADO (June 8, 2022) available at https://www.watereducationcolorado.org/fresh-water-news/ute-mountain-ute-tribe-faces-another-devastating-drought-year-but-recent-rain-wheat-prices-bring-hope/.

11. Bureau of Land Management, THE DOLORES RIVER, COLORADO: RECOMMENDATION FOR INCLUSION UNDER SECTION 5(D) OF THE WILD AND SCENIC RIVERS ACT. (1971).

12. I. Higgins Johnson, *Water—Transforming a Valley: A History of Montezuma Valley Irrigation Company*, MVIC WATER MANAGEMENT PLAN (2003).

13. J. Mimiaga, *A Future of Drought? Ute Mountain Ute Tribe Looks to Life with Less Water*, THE JOURNAL (December 14, 2021), available at at https://www.the-

better but by no means rosy, as those who received 10% of their water in 2021 received about 40% of their full allocations in 2022. As of April 2023, Dolores Project irrigators will receive at least 100% of their allocations because the Dolores River headwaters are at 184% of the 30-year snow water equivalent average.[14] Though the Colorado River had a record-breaking 2022-2023 winter, the issue of decreasing and uncertain water supply continues to impact the rivers of the American West.

The history of the Dolores Project provides a case study of how the Western United States shifted from a landscape occupied and stewarded by dozens of culturally distinct Indigenous nations, to a landscape subjugated by the Manifest Destiny goals of the U.S. government to benefit European-American citizens. The laws enacted by the U.S. government to remove Indigenous peoples and lay claim to their ancestral homelands resulted in the Colorado River Compact and other regulations that sanctioned widespread federal government campaigns to dam and divert rivers and manage other natural resources as mechanisms for predominantly White American economic growth. This research contributes to a more complete history of Colorado and the West that includes the history of Indigenous people and of their colonization by the United States.

Ute People in Colorado

I have acknowledged multiple Tribes who have cultural and spiritual connections to the Four Corners region and southwest Colorado. For my study I focus on the N*uuchiu* or Ute people as they have direct ties to the Dolores River historically and presently. According to the Southern Ute People (the Mouache and Capote bands) who live in Southern Colorado, the Utes have lived in Colorado "since the beginning of time," and also call themselves "the original Coloradoans."[15] The Utes speak Shoshonean, which is a branch of the Uto-Aztecan language. "Other Indians in the United States that speak Shoshonean are the Paiute, Goshute, Shoshone, and several California Tribes."[16] According to the Southern Ute Tribe website, their ancestors were all Shoshonean-speaking people who split off into multiple distinct Tribes, becoming

journal.com/articles/a-future-of-drought-ute-mountain-ute-tribe-looks-at-life-with-less-water/.

14. I*d*.; *see also* Colorado Snow Survey, Government Natural Resources Conservation Service (April 11, 2023) available at https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/states/colorado.

15. J. Speer, *Colorado Experience: The Original Coloradans*, ROCKY MOUNTAIN PBS (2013), available at https://www.youtube.com/watch?v=lWLdijamdcQ.

16. Ute Mountain Ute Tribe, Ute Mountain Ute Tribe, Ute Mountain Ute Tribe (2020), available at https://www.utemountainutetribe.com/.

the Paiute to the west, the Shoshone and Comanche to the north and east, and the Chemehuevi and Kawaiisus to the south.[17]

The people who remained Ute "became a loose confederation of tribal units called bands" who lived and traveled across the Rocky Mountain region in what is today called Colorado, Southern Wyoming, Northern New Mexico and a large portion of Eastern and central Utah.[18] Ute lifeways were embedded within and centered around mountains and other formations in this region. Their word for themselves, N*uche* (singular) or N*uuchiu* (plural), means "Mountain People" and varies in spelling and pronunciation across different bands.[19]

Before colonialism, the bands had distinct territories and central mountains around which they traveled moving up and down in elevation seasonally across this region. In Ute culture, movement across the landscape was a "basic value" for how they lived and took care of their food and medicine sources.[20] The wide availability of plant and animal food made agriculture unnecessary for the Ute people, so their ways of life were adapted to moving up and down the elevations of the mountains in an "appropriate" way that was logical with the seasons.[21] It was inappropriate to be in the mountains during the heavy snows of winter, for example, and that was the time of year where the People would camp in the lowlands of their territory. Fred A. Conetah of the Uintah-Ouray Reservation made clear the cultural imperative of his people when he wrote: "Tradition had taught [the Utes] that to stay in one place meant death."[22]

To maintain this high mobility, Utes tended to travel in family groups between 10 and 20 people and their belongings were designed to travel easily. Because of their historically minimal material culture, the clearest record of Ute occupation in Colorado are their well-worn trails over the routes of least resistance in Colorado's Rockies. We still follow many of those trails because

17. Southern Ute Indian Tribe, *Early History*, SOUTHERN UTE INDIAN TRIBE HISTORY (2022) available at https://www.southernute-nsn.gov/history/.

18. *Id*.

19. S. Burns, *The Ute Relationships to the Lands of West Central Colorado: An Ethnographic Overview Prepared for the* U.S. *Forest Service by the Office of Community Services, Fort Lewis College, Durango, Colorado*, CENTER OF SOUTHWEST STUDIES FORT LEWIS COLLEGE (August 28, 2007); *see also* Ute Mountain Ute Tribe, *supra* note 16.

20. Burns, *supra* note 19.

21. W. Wroth (ed.), UTE INDIAN ARTS & CULTURE FROM PREHISTORY TO THE NEW MILLENNIUM, Colorado Springs Fine Arts Centers (Colorado Springs, CO, 2000).

22. F.A. Conetah, A HISTORY OF THE NORTHERN UTE PEOPLE, Uintah-Ouray Ute Tribe (Salt Lake City, UT, 1982) (K. MacKay & F. O'Neil eds.), p. 56.

they were already well-marked when settlers arrived, and the easiest paths for building major roadways through the mountains.[23]

Historically, there were twelve distinct Ute bands, and six of them lived in and around Colorado. Their homeland boundary "lines were vague in definite limits and bands of Utes and other tribes shared border areas."[24] The spelling and pronunciation of each band name varies because there are different dialects of the Ute language between different bands. Bands of Utes named themselves and named other bands based on the places people lived or what they ate, and these names were fluid and changing over time. Spanish and U.S. governments also developed their own labels for bands, which added layers of complexity to the names associated with each group.[25] My spelling and location of Ute band names is largely based on the map below (**Figure 2**) from a Ute exhibit at the History Colorado Center, Denver.

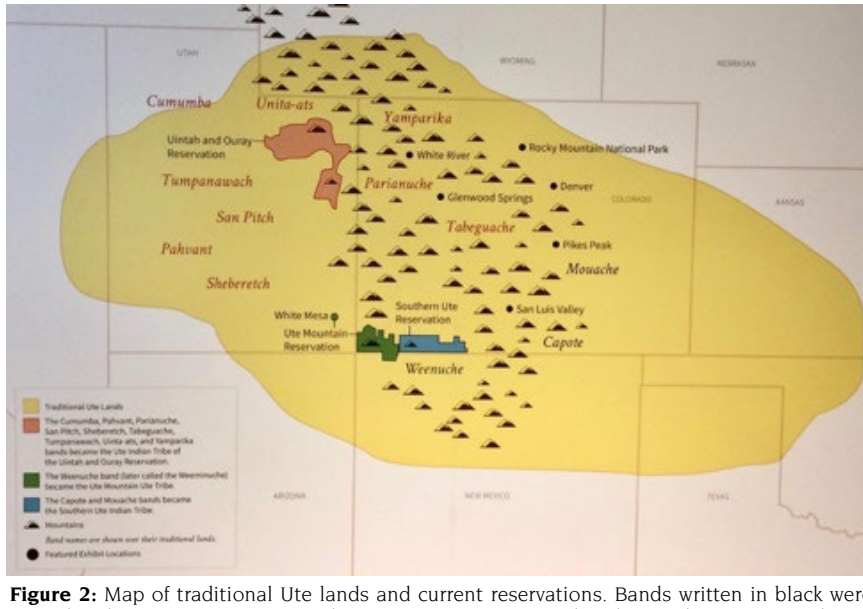


Figure 2: Map of traditional Ute lands and current reservations. Bands written in black were moved to the Ute Mountain or Southern Ute Reservation in Colorado. Bands written in red were moved to the Uintah-Ouray Reservation in Utah. Image source: History Colorado Center 2019.

The Parianuche and Yamparika lived in the White and Yampa River watersheds in northwestern Colorado and into eastern Utah. The Tabeguache band lived in the Uncompahgre and Gunnison River watersheds in central

23. Burns, *supra* note 19.

24. Ute Mountain Ute Tribe, *supra* note 16.

25. G. Briggs & C. Atencio, Tribal Historic Preservation Office: Origin, Responsibilities, and Procedures, Western University Inclusive Ecology Speaker Series (January 27, 2022); *see also* History Colorado Center, WRITTEN ON THE LAND: UTE VOICES, UTE HISTORY, History Colorado Center (2019); Burns, supra note 19.

Colorado up to around the Grand Junction area in the Colorado River watershed. The Mouache band lived on the eastern slope of the Rockies in what we call the Front Range region of Colorado in the Arkansas River watershed and south into New Mexico. The Capote band lived in south-central Colorado in the San Luis Valley and traveled into New Mexico in the Rio Grande River watershed. The Weenuche, or Weeminuche, lived in and around the San Juan River and Dolores River watersheds in northwestern New Mexico and southwestern Colorado. According to the Ute Mountain Ute Tribe website:

> The Weeminuche homelands included all the lands that they normally protected and regularly traveled through. Weeminuche lands extended north of the San Juan River in what is now New Mexico and Utah to the San Miguel River in Colorado and the La Sal Mountains in Utah (Ute Mountain Ute Tribe, 1985). The Continental Divide bounded their eastern range, and the Abajo Moun-tains in Utah marked their western boundary.[26]

Six other bands lived across Utah. I focus on the Colorado Utes and the Weenuche (Weeminuche) for this article.[27]

Tribes that were present near Ute territory during American westward expansion were the Cheyanne and Arapahoe in the plains to the east; the Kiowa and Comanche to the southeast; the Pueblo, Diné and Apache tribes to the south; the Paiute, Gosute and Chumash to the west; and the Shoshone to the north.[28] Now that I have provided foundational information about the Ute people in Colorado, I will next discuss European/Indigenous interactions in and around Colorado.

European and U.S. Settlers in Ute Lands

European and U.S. exploration and settlement on Indigenous lands is a defining factor of human experience in the Americas today. The events of

26. Ute Mountain Ute Tribe, *supra* note 16.

27. S*ee* Conetah, *supra* note 22; *see also* P. Decker, THE UTES MUST GO!: AMERICA EXPANSION AND THE REMOVAL OF A PEOPLE, Fulcrum Publishing (Golden, CO, 2004); R. Delaney, THE UTE MOUNTAIN UTES, University of New Mexico Press (Albuquerque, NM, 1989); J. Jefferson, R. Delaney, & G. Thompson, THE SOUTHERN UTES: A TRIBAL HISTORY, Southern Ute Tribe (Ignacio, CO, 1973) (eds. F. O'Neil); Wroth, *supra* note 21; Southern Ute Indian Tribe, *supra* note 17; J. Pettit, UTES: THE MOUNTAIN PEOPLE (3d ed.), Johnson Books (Denver, CO, 2012).

28. Native Land Digital, NATIVE LAND MAP, Native Land (2020), available at https://native-land.ca; see also J. Robison, D. McCool, & T. Minckley (eds.), VISION & PLACE: JOHN WESLEY POWELL & REIMAGINING THE COLORADO RIVER BASIN, University of California Press (Oakland, CA, 2020), p. 267.

exploration and conquest carried out by French, Spanish, Mexican, and U.S. government representatives in the Southwest echo into the present because current political boundaries and resource management policies of this region were shaped by European-American colonialism. I will begin with a brief overview of Spanish colonialism.

By about 1600, the Spanish had moved north from what is now Mexico into the southern edges of Ute territory in southern Colorado, brutally conquering Pueblo people in the name of God and the Spanish Inquisition. Because Utes were nomadic, and because Spain wasn't really invested in claiming more land to the north, the Utes were able to maintain sovereignty over their territory during Spanish rule of what is today New Mexico and southern Colorado. The Spanish and Utes were allies and trading partners on and off for over 200 years. Through this relationship, the Utes were one of the first Tribes to acquire horses from the Spanish. Horses helped the Utes travel farther and faster and to defend their territories more effectively. The horse became an important symbol of prowess and a focus of Ute culture.[29]

A few Spanish expeditions did travel into Ute territory in what is today Colorado and Utah, and they had Utes guiding them. Southern Colorado has a lot of Spanish place names because of Spanish exploration in the area. The most well-known Spanish expedition in this region is that of Dominguez-Escalante in 1776. They named the Dolores River (*El Rio de Nuestra Señora de los Dolores*—Our River of the Lady of Sorrows) as well as many other features which still carry Spanish names today. They also documented some of the first European accounts of the *Yutas* or Ute people.[30]

In 1821, Mexico gained independence from Spain, changing the government regime of New Spain. In **Figure 3** below, the region of the Mexican Cession and Texas were all part of Spain, and then of Mexico in 1821. Texas broke off from Mexico not long before becoming annexed into the United States in 1845. And then in 1848 Mexico gave up another huge chunk of land in the Treaty of Guadalupe Hidalgo which ended the Mexican American War**.** By 1853, the borders of the 48 mainland United States looked much as they do today. Note how Colorado was a crossroads of shifting colonial borders. These transitions of European power and shifting borders in the Americas took place with resistance of Indigenous peoples whose lives were upended.

29. Jefferson, Delaney, & Thompson, *supra* note 27; *see also* Wroth, *supra* note 21.

30. T. Noel & C. Zuber-Mallison, COLORADO: A HISTORICAL ATLAS, University of Oklahoma Press (Norman, OK, 20015).

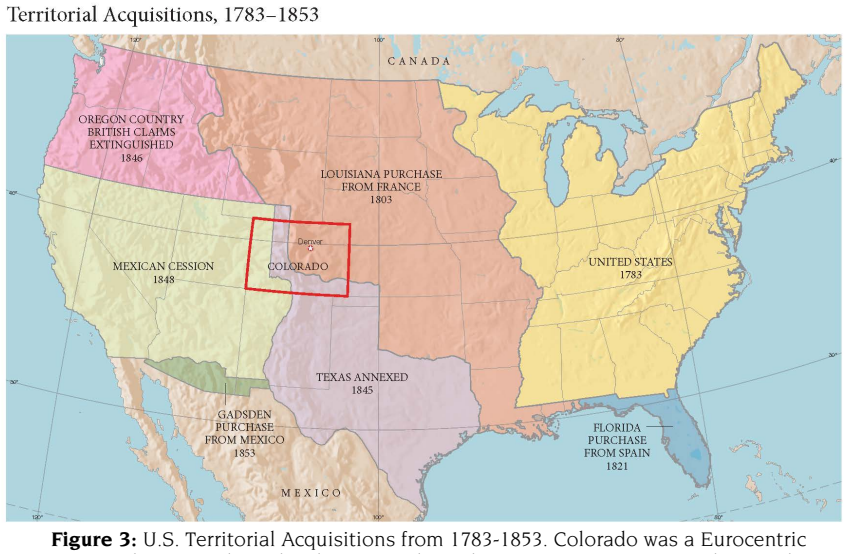


Figure 3: U.S. Territorial Acquisitions from 1783-1853. Colorado was a Eurocentric territorial crossroads, with subsequent claims by France, Spain, Mexico, the Republic of Texas, and the U.S. Image source: Noel and Zuber-Mallison 2015.

The region that is today Colorado was not considered desirable or habitable territory by settlers passing through on their way to the Pacific Coast following the gold strikes there in 1849. This changed ten years later when gold was discovered in Denver City on the South Platte River in 1859. The rush for gold brought so many American settlers to the area that within two years Colorado territory was established, carved out of the surrounding Nebraska, Kansas, New Mexico and Utah territories in 1861. During this rush for gold and push for Colorado territory, the Cheyenne and Arapahoe were violently removed from their homelands since time immemorial in less than four years' time, from 1861-1864, and moved to Oklahoma territory. This is why there are no Cheyenne and Arapahoe reservations in Colorado.[31] The same effort at removal was also directed at the Ute people, which took closer to four decades rather than four years.

Killing and removal of Indigenous people by settlers followed a similar pattern: Settlers would arrive on Indigenous lands in search of claiming land and mining lodes. Conflict would arise between settlers and Tribes over competition for land and resources. The U.S. government would try to stop those conflicts by confining Indigenous people to bounded land areas through treaties while promising to prevent more White intrusion. Inevitably, settlers would enter into those formerly promised lands, Tribes would fight back, and

31. J. Wolf, C. Whiteman, R. Williams, F. Mosqueda, & M. Heart, THE OTHER SIDE OF THE STORY: THE GENOCIDE OF INDIGENOUS PEOPLE IN COLORADO, (April 27, 2022) available at https://www.youtube.com/watch?v=tfS-CyFqAeY.

the U.S. would respond by further appropriating Indigenous lands with more treaties. The Ute experience exemplifies this pattern.

Once Colorado Territory was established in 1861, the U.S. negotiated a series of treaties with the Ute people that appropriated progressively more of their land. The Front Range of Colorado around Denver and Colorado Springs was occupied first. Settler and U.S. government encroachment chipped away at Ute lands in a westward progression. By 1895, 34 years after Colorado became a territory, only a small strip of land in the southwest corner of Colorado remained of Ute Reservation lands in the state. That 100-mile-long and 15-mile-wide strip of land became the Ute Mountain Ute and Southern Ute Reservations, the only Indian Reservations in Colorado (See **Figure 4**).

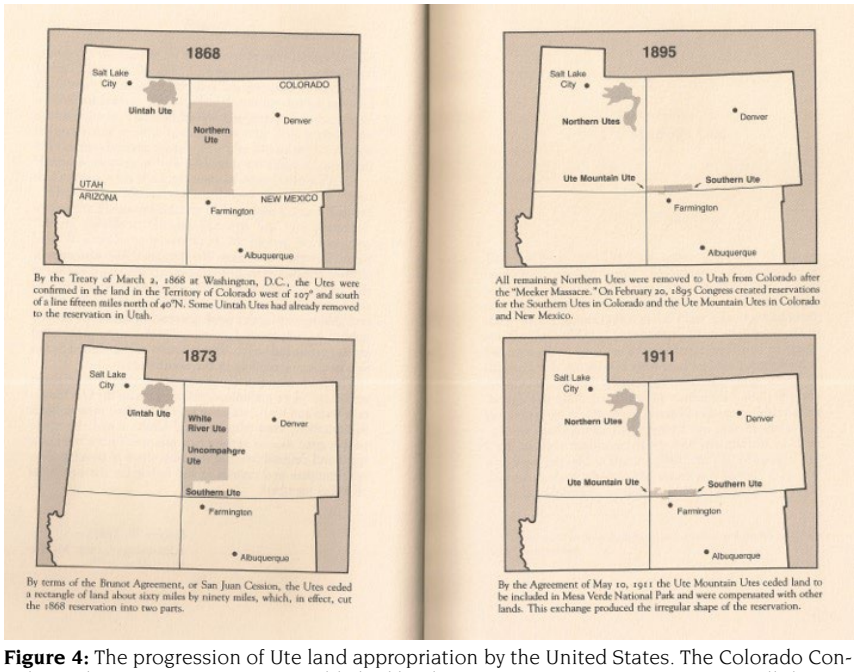


Figure 4: The progression of Ute land appropriation by the United States. The Colorado Confederated Ute Reservation was established by the 1868 Kit Carson Treaty. By 1895, all that remained of the 1868 Colorado Reservation was a small strip in the southwest corner of Colorado. Source: Delaney 1989.

In this process of Ute land acquisition in Colorado, all but three bands were removed to the Uintah-Ouray Reservation in Utah. The Mouache, Capote and Weenuche were confined to the Colorado Reservations. By 1881, the Western Slope of Colorado had opened to settlement and European Americans began occupying the remote southwest corner of Colorado. Almost as soon as settlers arrived in the region of the Dolores River, they began efforts to divert the river to the neighboring San Juan watershed. The Dolores River cuts a narrow canyon with limited agricultural land, but just south and west of the Dolores River canyon is a broad dry plain with plenty of good soil known as the Great Sage Plain. Settlers wanted to make that sagebrush plain

agriculturally viable, which was only possible by diverting the Dolores River through the low divide from its drainage to the neighboring San Juan drainage. By 1920, two major diversions had been constructed and were supporting domestic and agricultural European-American livelihoods with hundreds of miles of canals spread across the Great Sage Plain.

While settlers were establishing their irrigated economies in the southwest corner of Colorado, Utes were forced to adjust to rapid loss of their lands, livelihoods and cultures, relegated from lifeways of free roaming and self-determination to small reservation land and U.S. food rations. Land appropriation by the U.S. resulted in what Indigenous scholar Dina Gilio-Whitaker calls an Indigenous "post-apocalyptic world." This is due to: 1) land appropriation and removal from land in the form of many Tribal Trails of Tears; 2) destruction of land and Indigenous livelihoods; 3) separation from and desecration of sacred sites; and 4) forced assimilation through military force and military boarding schools. Despite this history of harm in many forms, Indigenous people have persisted, resisted and are still here. Indigenous people have not given up fighting to teach their culture and hold the U.S. government accountable to their rights.[32]

How the Ute Mountain Utes Negotiated for Their Water Rights

When the Ute Mountain Ute Reservation (home to the Weenuche band) was established in 1895, the only major source of surface water was the Mancos River. Indian Reservations come with a federal water right established by the 1908 Winters Doctrine. The Winters Doctrine states that Indian Reservation water rights date to the establishment of the reservation, which is often senior to all other water rights holders. Under the Winters Doctrine, the Ute Mountain Utes should have an 1868 right to the Mancos River. But in the late 1800s and early 1900s settlers upstream began irrigating in the Mancos Valley diverting most of the Mancos river before it reached the Reservation (See **Figure 5**).

Then, in the 1950s, the Bureau of Reclamation built Jackson Gulch Reservoir and further dewatered the Mancos River in the Ute Reservation without ever including the Utes in the water planning and decision-making. This was a clear breach of Ute Reservation Winters Doctrine rights. The Ute Mountain Ute Reservation had no good quality running water, either from the Mancos River or other sources, and residents had to truck water in or wait for it to be delivered in order to have water for drinking and domestic purposes.

In 1975, President Nixon signed the Indian Self-Determination and Education Assistance Act, which gave Tribes the administrative authority to

32. D. Gilio-Whitaker, As Long as Grass Grows: The Indigenous Fight for Environmental Justice from Colonization to Standing Rock, Beacon Press (Boston, MA, 2019).

"provide their own services" instead of the federal government carrying out these services for them. In this way, Tribes could "negotiate contracts and compacts directly with the federal government to run their own programs and deliver their own services."[33] This law opened doors for Tribes to decide what they themselves need, advocate for those needs and benefit from what the federal government can offer, rather than having the federal government impose decisions, actions and supposed benefits upon them.[34]

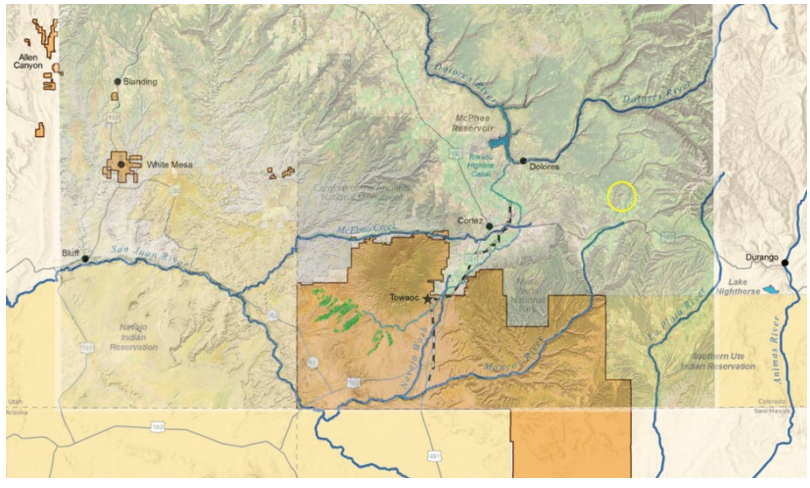


Figure 5: Map of Ute Mountain Ute Reservation in orange, and Dolores River and water delivery infrastructure from McPhee Reservoir to the Reservation. Towaoc is the Ute Mountain Ute Tribal headquarters. The Towaoc Highline Canal is denoted in light blue and the treated water pipeline is denoted in black and white. Jackson Gulch Reservoir on the Mancos River is circled in yellow. Note the Mancos River draining into the Ute Mountain Ute Reservation below Jackson Gulch. Image layering and modifications by the author. Image sources: Bezy 2017; Ten Tribes Partnership and Bureau of Reclamation 2018.

With the advent of the Indian Self-Determination Act, the Colorado Utes (Ute Mountain Utes and Southern Utes) began to quantify their reservation water rights in the late 1970s and decided to pursue a settlement to get water rather than try to acquire it through the courts. At this time, Dolores Project construction was underway, which includes McPhee Dam on the Dolores River and diversion infrastructure moving the Dolores River to the neighboring San Juan River drainage for irrigation and domestic uses. The Dolores River had been diverted for 100 years by settlers at this point, but the large-scale storage of McPhee Reservoir was the major update of the Dolores Project, creating large-scale supply and improved diversion and delivery infrastructure.

33. University of Alaska Fairbanks, Indian Self-Determination and Education Assistance Act (ISDEAA) 1975, Federal Indian Law for Alaska Tribes, available at https://www.uaf.edu/tribal/112/unit_3/indianselfdeterminationandeducationassistanceactisdeaa1975.php.

34. Lee-Martinez, *supra* note 3.

In the process of the settlement, the Utes negotiated with the Dolores Water Conservancy District that manages the Dolores Project. They also negotiated with local counties, environmental interests and state and federal entities. The crux of the negotiation came down to the Utes agreeing to subordinate their senior Mancos River rights to Mancos Valley irrigators upstream, thereby protecting those upstream irrigation rights. The Ute Mountain Utes have a right to whatever flows into the Reservation from the Mancos but cannot claim any water that would harm irrigators in the Mancos Valley. In exchange, the Utes received the funding and a water right to build delivery infrastructure from the Dolores Project to the reservation. The resulting Colorado Ute Indian Water Rights Settlement was ratified by Congress in 1988.

Satisfying Ute Indian water rights was what ultimately motivated the federal government to follow through on funding and completing the Dolores Project. Ute Mountain Ute Tribal headquarters at Towaoc received running water via a 21-mile domestic pipeline in 1988, and in 1993 the Towaoc Highline Canal was completed, delivering agricultural water. In **Figure 5** are the 41-mile irrigation canal to the Ute farm and ranch enterprise in light blue, and the treated water pipeline to Towaoc in black and white. This was significant for the Tribe because they lived without running water on the reservation for over 100 years. Good quality drinking water and irrigation water made it possible for the Ute Mountain Utes to develop economically and to further practice cultural self-determination. Through the Settlement process, the Colorado Utes became involved in the decision-making for water management on their reservation, which contrasts with the historical treatment of Tribes as an afterthought by government decision-makers in water planning and management in the Colorado River basin.

It is significant that the Dolores Project was built partially to honor the water rights of the Ute Mountain Ute people, one of 30 federally recognized Tribes in the Colorado River watershed. Tribes in the Colorado River Basin and beyond have struggled to have their water rights treated as legitimate. According to Indigenous Journalist Kalen Goodluck, "12 of the basin's tribes (most in Arizona) have unresolved water rights claims, and eight of those 12 have unquantified rights—meaning the amount of water they have a right to is not yet determined."[35]

According to Goodluck, more than one third of Colorado River tribes do not have their water rights clearly defined, let alone have infrastructure to access that water.

35. K. Goodluck, *Tribes Call for Inclusion on the Colorado River*, WATER EDUCATION COLORADO (April 25, 2022), available at https://www.watereducationcolorado.org/publications-and-radio/headwaters-magazine/spring-2022-water-for-the-wests-first-peoples/tribes-call-for-inclusion-on-the-colorado-river/.

> Even for tribes with settled or adjudicated water rights, some can't access the full extent of that water because of lack of infrastructure or funding, or both. In total, just under half, or 1.5 million-acre-feet, of settled or adjudicated tribal rights have not yet been put to use by the tribes.[36]

In total, Colorado River Tribes are unable to access more than half of the water they have a right to because of lack of resolved water rights, lack of funding and/or lack of infrastructure.

Within this context, the fact that the Ute Mountain Ute Tribe received a water right, funding and infrastructure for Dolores Project deliveries is significant. Even so, the Ute Mountain Ute essentially had to forgo their senior rights to the Mancos River in order to receive funding and infrastructure for a junior right to the Dolores River. This kind of sacrifice is what other Tribes in the basin are facing in order to get some water. In Arizona, for example, many Tribal leaders are frustrated by the state's unprecedented condition for Tribes to secure their water rights: in exchange, Tribal nations must surrender their right to freely enter fee lands into trust, an essential administrative program of the Bureau of Indian Affairs that lets Tribes recover their ancestral homelands.[37]

Essentially what this condition does is force Arizona Tribes to weigh "their right to re-acquire their ancestral homelands against securing water for their people."[38] In order to get water in this over-allocated system, Colorado River Tribes have to trade one right for another. As Ute Mountain Ute Chairman Manuel Heart put it, Tribes have to "give up something to get something."[39] In the Colorado River Basin, Tribal power is not granted as much legitimacy as United States government power, as exemplified by gaps in Indigenous water access compared to non-Indigenous U.S. populations.

A positive trend over time has been the increasingly broad inclusion of stakeholders affected by resource management. In 1922, the Colorado River Compact was signed by White male federal and state representatives. In 1988, the Ute Water Rights Settlement was supported by men and women, Tribes and Anglos, farmers and environmentalists, and local, county, state and federal representatives. This broadening of representation is even visible at the federal level with the first Indigenous Secretary of the Interior, Deb Haaland, appointed in 2020 and subsequent first-time Indigenous appointments for Director of the National Park Service and the U.S. Treasurer.

36. I*d*.
37. I*d*.
38. I*d*.
39. Wolf, et al., *supra* note 31.

Indigenous Sovereignty in the U.S. Gains Authority, Legitimacy and Power

The Tribal experience of being removed from their homelands, isolated to limited land and resources and excluded from rights by the U.S. government is an ongoing issue today. Lakota scholar Richard Williams states that "The greatest injustice that has gone on unresolved for [Indigenous] people was done by the legal system."[40] The U.S. has taken on contradictory roles in its relationship with Indigenous people, as a paternalistic "protector" through its trust responsibility, and as a colonizer continuously disenfranchising Tribes through the legal system. Williams describes this "justice system" as "an eagle that can't fly." He continues: "...we have the trust system on [one] side. The trust system says the government is supposed to take care of you and protect you. And on the other wing of this American eagle that can't fly is the justice system and they're saying you don't have any rights." This "eagle" can't fly because one wing cancels out the other. It is not possible to have protection from and receive the benefits of a government if that government was built on disregarding your rights and your humanity. The 1922 Colorado River Compact which essentially excluded Tribes is a prominent example of how the U.S. justice system has carried out its relationship with Indigenous peoples. The Tribes were mentioned as an afterthought, and their rights and sovereignty were not accounted for in the same manner as those of each Colorado River Basin state. The current gaps in water access for Indigenous people compared to White people is a direct result of this (in)justice system.[41]

While the Ute Mountain Ute Tribe has historically been oppressed by U.S. government actions, over time the Tribe has built power, authority and legitimacy to claim water and to advocate for their own and other Indigenous water rights. The power dynamics of colonialism are foundational to the water and land management of our current era. Therefore, the ideas of who has legitimacy and who has power are certainly reflected in the fact that most water leaders have historically been White men and that most beneficiaries of federally funded water projects have been European-Americans.

The entire history of Colorado removing Utes to Reservations is not well-known to most Coloradoans. This erasure of colonization history perpetuates colonial understandings of the United States that Indigenous genocide and land theft were justified to make way for Manifest Destiny and Westward expansion. Erasure of Indigenous history and systematic Indigenous disenfranchisement have been dominant themes in settler/Indigenous relations.

A former Ute Mountain Ute Tribal attorney noted this about power dynamics around Dolores River management:

40. I*d*.

41. I*d*.

> …there is a real sense of who rightfully holds power and who does not that is pretty ugly.
>
> And that is very much at play in this discussion, I think.
>
> I think a lot about the way that people introduce themselves at water meetings…if you're a third generation or fourth generation White farmer, that's how you introduce yourself. And I think a lot about like, what Indigenous people who have been on the land for thousands of years think about that. There is, I think, a real question about who's legitimate in making decisions in the water space.[42]

The former Tribal attorney directly addresses the contrast of power between Indigenous nations who have been connected to the land in southwest Colorado for countless generations yet are not well-represented in water and land decision-making, and European-American farmers who have been on the land for several generations and tend to be the people with senior water rights. The former Tribal attorney says there is an "ugly" tension over "who rightfully holds power and who does not."[43]

The "question about who's legitimate in making decisions in the water space" received a clear answer in the Bureau of Reclamation's 2012 Colorado River Basin supply report that did not include Tribal water in its calculations. Since that report was released, Colorado River Basin Tribes have been actively conducting their own studies and requesting federal government entities include them and take them seriously.

The resulting 2018 Tribal Water Study, conducted by ten Colorado River Basin Tribes and the Bureau of Reclamation, made clear that the quantified water of 22 Colorado River Basin tribes adds up to "3.2 million acre-feet of water, or an estimated 22% to 26% of all annual water supplies in the basin."[44] At least eight of the 30 Basin tribes don't even have their water quantified, let alone the infrastructure to deliver their rightful water to their reservations. The Ute Mountain Ute and Southern Ute Tribes were two of the first in the basin to quantify their water rights and actually receive some of that water via the 1988 Colorado Ute Indian Water Rights Settlement. The Southern Utes have yet to actually receive water from their portion of the Settlement. This is a common issue in the Colorado River Basin—Tribal water rights have not been treated as legitimate in the same way that European-American water rights have—namely in how water rights and federally-funded infrastructure

42. Lee-Martinez, *supra* note 3.

43. I*d*.

44. Goodluck, *supra* note 35.

have been distributed to maximize benefits for settlers over Indigenous nations and other people of color.

Daryl Vigil of the Jicarilla Apache Nation noted that the Colorado River Compact negotiators were "'older white gentlemen' who made no plan for apportioning any share of water to Native American tribes."[45] In fact, "The [Compact] commission simply assumed that the water rights of Indians were 'negligible.'" As I mentioned previously, Tribal Reservations have rights to one quarter of Colorado River flows. Rather than being 'negligible,' this is a significant portion of the river.

I knew an undergraduate student from the Navajo Nation who was researching water management. He and I had a conversation about augmenting water supplies in the Colorado River basin and about building infrastructure on the Navajo Reservation so that the people living there could finally have running water.

It is instructive to describe how I responded to this young man's desire to honor the basic right that we all should have—access to clean abundant water. I responded that the Colorado River is over-allocated and "who is going to fund building more destructive dams and inefficient long-distance canals?" My response was informed by my early understanding of environmental degradation—that dams are problematic for riparian health and that building more water infrastructure is just going to further dewater rivers.

I did not have the awareness then that the majority of water infrastructure in place in the Colorado River Basin was built for White settlers, not for Indigenous peoples or for Reservations. I benefit from the Dolores Project—water infrastructure built first for settlers, but later augmented to incorporate the needs of the Ute Mountain Ute Reservation, and I was taking that privilege for granted. Indigenous people are still struggling to receive basic rights that most other people take for granted in the United States. For example, "48% of Tribal homes do not have access to reliable water sources, clean drinking water, or basic sanitation."[46]

I wish I could return to that conversation with the Diné undergraduate student and respond: "Yes! I support you in your effort to get running water to your people!" Now I better understand that environmental harm caused by dams and other large-scale water infrastructure is inseparable from human harm to Indigenous people. And that large-scale water infrastructure has rarely been built for the benefit of Indigenous people.

Today, Tribes have even more obstacles in getting Colorado River water than the Ute Mountain Utes did during the 1988 Settlement. An important factor in the Dolores Project being completed and the Ute Mountain Utes getting water was timing. I asked two people who were involved in the Settlement negotiations if they think such a settlement could be reached if it were going

45. I*d*.

46. Tribal Clean Water, *supra* note 9.

on today. They both responded "no," but for different reasons. One talked about political divides as a barrier to such a settlement today, and stated: "I think people are way more unreasonable now…look at politics, they're so dang polarized."[47] They go on to say that division between political parties did not come into play like they do now. "I think back in the day when this [settlement] happened we still had middle of the road politics…People [at that time] went into these meetings with an agenda, but they didn't go in with a political agenda." A person's political party "just didn't matter" during that time in the way that current political party affiliations are so charged with polarity.

According to the second person I talked to about the 1988 Settlement, that process wouldn't happen today because of current barriers to building dams and the issue of "water availability." "Currently, Reclamation is no longer building large irrigation projects…If the Tribe were trying to negotiate a Settlement today, a project such as the Dolores Project would not be funded by Congress or constructed by Reclamation." In addition to lack of federal investment in dams, "The other big change is water availability…Water scarcity makes water negotiations much more difficult than they were when water seemed plentiful in the 1980s and 1990s."[48] These barriers to collaboration: political polarization, lack of federal investment in large-scale water infrastructure, and long-term drought may be issues that other Tribes in the Colorado River Basin are currently contending with in their efforts to have their reserved water rights quantified and made accessible, while also fighting to be included as sovereign nations in natural resource decision-making.

While secondary status has been the legal and historical norm for Tribes in the Colorado River watershed, that is changing. Currently, a political shift is taking place, where Tribes are being included and listened to in water decision-making processes. For example, in 2022 the Colorado Water Conservation Board invited the Ute Mountain Utes and Southern Utes to participate. Board director Rebecca Mitchell "has been meeting with the…[two] tribes to develop a sovereign-to-sovereign framework, a process for tribes and the State of Colorado to engage on equal ground throughout water management negotiations."[49] The state of Colorado is setting an example for what the future of Colorado River management can look like—where Tribal water rights and Tribal sovereignty are treated as legitimate by the United States government. Tribes cannot be ignored or treated as an afterthought any longer. As we go forward in the Colorado River Basin, Indigenous sovereignty must be treated as legitimate by U.S. natural resource managers, and future legal documents must include the input of Tribes.

47. Lee-Martinez, *supra* note 3, at 222.

48. I*d*. at 222-23.

49. Goodluck, supra note 35.

Conclusion

I provided a historical narrative to describe the progression of events that created the world of land and water management today in the Dolores River Watershed and in the Colorado River Watershed. This history is important because we who depend on water from the Colorado River Basin are directly affected by that history right now. Indigenous people formerly occupied all the lands of the Americas with a multitude of cultures. The United States appropriated the land we live on from Indigenous nations. That land appropriation made water appropriation possible. Almost as soon as European-Americans claimed the lands of Colorado, they began to claim water rights. Those water rights separated water from land, prioritizing timing of water use rather than location. This made it necessary to construct large-scale infrastructure to move water to those who have rights to it.

Because water rights were largely granted to and funded for White settlers, Indigenous nations and other people of color, as well as the natural environment, experienced exclusion from the benefits of large-scale water infrastructure, and also experienced harm from much of that infrastructure. Understanding this progression of land and water appropriation helps us understand the structural inequalities in place for water use today and how those who have the most secure access to water tend to be those given the most authority, legitimacy and power in the American West. This understanding also no longer allows us to take for granted the "truly astonishing infrastructure" that brings "improbable comfort" to many, but not to all.[50]

This history provides a foundation to the current Indigenous efforts to have their cultural, land and water sovereignty treated as legitimate by Colorado River managers, and what the future may hold for water users in the Dolores River and Colorado River basin at large as we contend with aridification and increasing unpredictability in climate conditions of the Western United States.[51]

50. Nelson, et. al, *supra* note 8, at 81.

51. B. Udall & J. Overpeck, *The Twenty-First Century Colorado River Hot Drought and Implications for the Future*, 53 WATER RESOURCES RESEARCH 2404, 2418 (2017).

*Lawrence J. MacDonnell**

THE 1922 COLORADO RIVER COMPACT AT 100

One hundred years ago, on November 24, 1922, the eight men negotiating a compact governing use of the water of the Colorado River and its tributaries reached final agreement. This article looks back to the prolonged negotiation, hard-fought agreement, and challenging ratification and approval of the 1922 Colorado River Compact. It traces three distinct phases of the struggle to reach agreement on apportionment of the Colorado River system's water supply among the seven basin states. Finally, the article looks at the Compact's strengths and shortcomings while serving as the foundation of the Law of the River.[1]

As the Colorado River Compact Commissioners gathered in Washington, D.C. for the first time, the Knickerbocker Snowstorm hit the city. Image courtesy of the Smithsonian.

The First Meeting

January 26, 1922 was a cold and cloudy day in Washington, D.C. The eight members of the Colorado River

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1. For a comprehensive summary of the Law of the River, see Lawrence J. MacDonnell, Colorado River Basin, Waters and Water Rights (New York: LexisNexis, 2021), available online at SSRN: https://ssrn.com/abstract=3780342.

Commission gathered for their first meeting at the Department of Commerce offices. The year before, Congress had authorized negotiation of a Colorado River Compact by representatives of the seven basin states, together with a federal representative who was to protect the interests of the United States.[2] Relying on the authority provided in the U.S. Constitution for states to enter into compacts,[3] Congress empowered the states to "negotiate and enter into a compact or agreement not later than January 1, 1923, providing for an equitable division and apportionment among said States of the water supply of the Colorado River and of the streams tributary thereto…."[4] Never before had the Compact Clause been used to apportion the water of an interstate stream, and the ambition of the undertaking was remarkable.

Delph Carpenter at his desk in the Colorado Senate, 1911. Courtesy of the Water Resources Archive, Archives and Special Collections, Colorado State University.

That the states and the United States could even agree to try to negotiate reflected a confluence of circumstances in which all the parties had determined they could not achieve their water development objectives independently and that further development and use of basin water depended on reaching mutual accommodation. Each of the members of the Colorado River Commission entered the process with different interests and objectives. For Colorado's Delphus E. Carpenter, the leading proponent of using the compact authority, the biggest concern was to establish a legal right to future use of basin water in Colorado that would not be jeopardized by rapid development and use of water in California. As lead attorney for the State of Colorado in the interstate dispute in the U.S. Supreme Court with Wyoming respecting uses of the Laramie River, Carpenter witnessed first-hand the difficulties with using courts to resolve interstate water disputes.[5]

2. Act of August 19, 1921, ch. 72, 42 Stat. 171.
3. U.S. Constitution, Article I, Section 10, clause 3.
4. Act of August 19, 1921.
5. Wyoming v. Colorado, 259 U.S. 419 (1922).

Wilbur F. McClure, State Engineer

The California representative, W.F. McClure, who was the state engineer, was in a very different position. Use of Colorado River water in California's Palo Verde valley had begun as early as the 1870s.[6] Irrigation in Imperial Valley, a desert area at California's southern extreme with about 400,000 acres of irrigable lands, began using water from the Colorado River in 1901. Flooding and other problems with irrigating this vast area prompted Congress in 1920 to direct the Secretary of the Interior to study ways of securing irrigation in Imperial Valley.[7] The report, known as the Fall-Davis Report, strongly supported construction of a high reservoir in the canyons of the Colorado River mainstream for flood control, supply of irrigation water in the low flow months, and generation of hydroelectric power to pay project costs. It also supported construction of what came to be called the All-American Canal, with water diverted from the Colorado River at or near Laguna Dam and carried by gravity through a canal running just north of the border with Mexico.[8] McClure felt comfortable that existing and potential future uses of Colorado River water for irrigation in California had been well studied. His focus was to ensure that California received rights to enough water to fully irrigate these lands while protecting already existing water rights. At the urging of Imperial Valley interests, he also supported construction of the dam in the vicinity of Boulder Canyon.

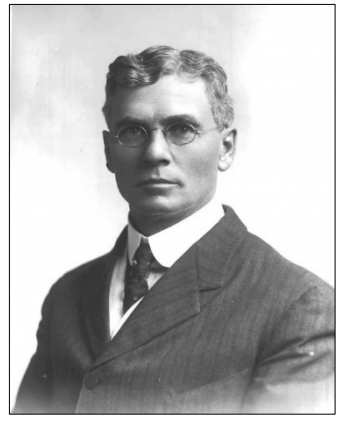
As the federal representative to the Commission and as its elected chair, Herbert Hoover urged consideration of how best to develop the full potential of the basin, including development of the water storage and hydropower that would be necessary to achieve this end. Hoover was Secretary of Commerce and, of course, went on to become President of the United States. He had been a successful mining engineer and, during World War I, served in several capacities leading efforts to provide food and other sources of support to displaced people in Europe.[9] His presence as the federal representative to the Commission gave it considerable weight.

6. Palo Verde Irrigation District, History of the Palo Verde Valley, available online at https://www.pvid.org/history.php.

7. 41 Stat. 600 (1920).

8. Department of the Interior, Problems of the Imperial Valley and Vicinity, February 22, 1922 (Fall-Davis Report).

9. https://www.whitehouse.gov/about-the-white-house/presidents/herbert-hoover/



Arthur P. Davis. Courtesy of the National Geographic Society.

Serving as de facto technical advisor to the Commission was Arthur P. Davis, nephew of John Wesley Powell, chief of the Reclamation Service, and the Davis of the Fall-Davis Report. Davis had been with the Reclamation Service since 1906, becoming its director in 1916.[10] Along with colleagues in the Geological Survey and the Reclamation Service, Davis had been investigating opportunities for full development of the water resources of the Colorado River Basin for many years. In his statement to the Commission at that first meeting, Davis repeated his conclusion reached a year earlier that "with proper and sufficient conservation [storage] … there would be sufficient water for the irrigation of all the lands that could be favorably reached from the standpoint of economics within or adjacent to the Colorado Basin…."[11]

The interests of W.S. Norviel, the Arizona Commissioner, were perhaps the most obscure. Of course, he was concerned that California's water development plans not interfere with Arizona's future uses of system water. He reminded the Commissioners that virtually the entire State of Arizona was within the outlines of the hydrologic Colorado River Basin.[12] He brought a prepared statement that sought to establish a wide range of objectives, including a proposal allowing continued development of water for irrigation of additional lands for 20 years, construction of a dam near Lee Ferry, and construction of a dam at Boulder Canyon.[13]

The other four Commissioners were all highly respected leaders in their respective states, but they came with less well-defined objectives except to ensure that their states received enough water to irrigate all potentially irrigable lands within their boundaries. Wyoming was represented by the youngest member of the group—State Engineer Frank Emerson. His remarks indicated his deep knowledge of Wyoming water, including the Green River Basin (tributary to the Colorado River). He acknowledged his limited familiarity with issues in other states, especially in the lower part of the basin, and mentioned a trip he had just taken along the lower Colorado River and into Imperial Valley to gain a better understanding of the area. Utah was represented by R.E. Caldwell, State Engineer. Caldwell

10. https://www.usbr.gov/history/CommissBios/davis.html

11. Minutes of the First Meeting of the Colorado River Commission, January 26, 1921 at 28.

12. Minutes of the First Meeting at 20.

13. Minutes of the First Meeting, at 49-54.

seemed perhaps the most flexible of the Commissioners, readily adjusting his views as the discussions developed. The New Mexico representative was Justice Stephen B. Davis, an experienced water lawyer recently appointed to the New Mexico Supreme Court. Davis had worked with Carpenter in negotiating an agreement for uses of the La Plata River between Colorado and New Mexico.[14] Nevada was represented by Col. James G. Scrugham, who also served as State Engineer, and was elected governor of Nevada in November 1922. Of all the states at this first meeting, Nevada had by far the fewest number of irrigable acres and therefore less at stake.

James G. Scrugham c. 1943. Courtesy of the U.S. Senate Historical Office.

The Commissioners had been assured that, with sufficient water storage, there would be enough water to fully irrigate all suitable lands within their states. They all recognized the risk that, without a negotiated agreement, there was a likelihood of future conflict and probable litigation. They brought impressive experience with water matters in their own states but not necessarily respecting the Colorado River and its tributaries. They were deeply suspicious of any effort by the U.S. government to assert control of the basin's water resources. They generally welcomed federal support for construction and operation of large reservoirs on the main Colorado River the cost of which exceeded the means of the states. But they wanted clearly defined blocks of water apportioned to each state the use of which they would control.

Towards the end of the first meeting Hoover suggested establishing three working committees: one concerning the available water supply with and without storage, a second determining the extent of irrigable acreage in each state and the associated water requirements, and the third to address legal issues.[15] He suggested that Commissioners McClure and Emerson work with A.P. Davis on water supply, that Commissioners Norviel, McClure, and Scrugham study water requirements, and that the two lawyers, Carpenter and Justice Davis, address legal issues.

The Negotiations: Phase One

The real negotiations got off to a rocky start when the Commissioners gathered four days later to review the work of the Committee on State Water

14. La Plata River Compact, available online at https://www.ose.state.nm.us/Compacts/LaPlata/PDF/La_Plata_River_Compact.pdf.

15. Minutes of the First Meeting, at 46.

Requirements. Reclamation's studies had determined total water requirements for all irrigable acres within the hydrologic basin of the seven state to be just under 14 million acre-feet (maf) per year (6.3 for upper states and 7.68 for lower states.)[16] The Committee on Water Requirements, with input from each of the states, placed ultimate water requirements at over 20 maf per year.[17] After some discussion, the Commissioners modified their estimates, reducing total water requirements in the United States to 17.6 maf.[18] With requirements for lands in Mexico included, the total was 20.9 maf.[19] After the morning meeting concluded, the Committee on Water Supply submitted a report from the U.S. Geological Survey showing average annual flows at Yuma, Arizona between 1902 and 1920 of 17.3 maf.[20] This figure represented the amount of water thought to be available for future upstream consumptive uses and losses and for all existing and new uses in California and Mexico. For the first time the Commission faced the prospect that basin water supplies were not sufficient to meet full water demands.

16. Minutes of the Sixth Meeting, Table A at 70. Reclamation estimated total California requirements at about 4.1 maf/year; Arizona at about 3.5 maf/year; and Colorado at about 2.6 maf/year. The last published Consumptive Uses and Losses Report for the Colorado River Basin (2001-2005) shows annual average uses during this period in California of 4.7 maf/year; Arizona 4.7 maf/year; and Colorado 2.1 maf/year.

17. Minutes of the Sixth Meeting, Table C at 72.

18. Minutes of the Sixth Meeting, Table C (rev'd) at 78.

19. Id.

20. Minutes of the Sixth Meeting, at 89. The Yuma gauge was located just above the international boundary with Mexico, below where the Gila River (the last system tributary) discharged into the Colorado, and above the point of diversion for water used to irrigated lands in Mexico and in Imperial Valley. As such, it reflected the system's water availability at this point during that period. It did not reflect the roughly 2.6 maf used in Mexico and Imperial. Nor did it take into account upstream consumptive uses and losses. As Kuhn and Fleck point out, it also failed to make any adjustment for the growth of water use during this period, an adjustment that would have reduced actual water availability some 1.3 maf. Eric Kuhn and John Fleck, *Science Be Dammed: How Ignoring Inconvenient Science Drained the Colorado River* 45, Table 2 (2019) (Science Be Dammed.) This figure was later changed to 17.4 maf with the decision to remove the partial-year record in 1902.

Secretary of Commerce Herbert Hoover ca.1921. Courtesy of the National Archives.

Some efforts were made at the end of the Sixth Meeting to find a way to deal with this apparent imbalance, but none gained wide support.[21] In the Seventh Meeting that afternoon, Commissioner Carpenter interjected Colorado's position that, as a sovereign state, it had the right to unfettered development and use of all the water within its boundaries.[22] This view, based on the conclusion of U.S. Attorney General Judson Harmon in 1895 that the United States had no legal obligation to ensure the availability of any certain amount of water to Mexico and could develop and use all the water originating within its boundaries to the extent there existed beneficial uses for the water, was also the argument Carpenter had presented to the U.S. Supreme Court in W*yoming v. Colorado*[23] in support of Colorado's claims to unrestricted use of the Laramie River in Colorado. The U.S. Supreme Court had yet to make its decision so Carpenter was compelled to maintain his legal position in the early Compact negotiations.

> As the afternoon wore on, Hoover expressed his exasperation: We have not been able to get to agreement on any single general idea for a compact. Therefore, this session has no result except to define differences. The question arises, is it worthwhile to have another session? Or shall we make the declaration now that we are so hopelessly far apart that there is no use in proceeding.[24]

21. Justice Davis proposed authorizing the appropriation and use of water necessary to irrigate a maximum number of acres in each state without priority of use and to establish a permanent Colorado River Commission to authorize irrigation of additional lands so long as the use would not prove detrimental to existing uses. Hoover suggested establishing a permanent Colorado River Commission with authority to determine equitable division of water and allot unappropriated water. He made that division contingent on construction of one of the major proposed dams.

22. Minutes of the Seventh Meeting, at 108. In effect, Carpenter's proposal would give Upper Basin uses a permanent priority. He expressed a willingness to consider some kind of cap on out-of-basin transfers. Seventh Meeting at 145. Carpenter placed great weight on the significant share of the basin's water supply that originated in Colorado.

23. 259 U.S. 419 (1922).

24. Minutes of the Seventh Meeting at 141.

His admonishment prompted Commission members to speak up in support of continued efforts. The Commission agreed to reconvene in 60 days or so in the Southwest for the purpose of holding public hearings to gather additional input.[25]

Phase Two: The Hearings

The first public hearing was held March 15, 1922 at Phoenix, Arizona, and the last concluded April 2 in Cheyenne, Wyoming. According to Norris Hundley, one of the most challenging issues to emerge in the hearings was the matter of interbasin transfers of water.[26] Reclamation's analysis of water requirements contemplated only irrigation of lands within the hydrologic basin. But, in fact, water was already being diverted out of the basin: at the headwaters of the Colorado in the State of Colorado for irrigation use on the Front Range, via the Strawberry Valley Project taking water from the Green River Basin for use in the Provo River Basin in Utah, and from the Colorado River into Imperial Valley.[27] Carpenter had already signaled Colorado's plan to divert over 300,000 acre-feet out of the Colorado Basin for use on the Front Range. At the hearings, even higher estimates were presented.

A second challenge emerged in the form of George H. Maxwell, director of the National Reclamation Association and aggressive proponent of a "high line" canal that would carry water from the Colorado River hundreds of miles to central Arizona where it would be used, he claimed, to irrigate 2,500,000 acres of land.[28] Reclamation had already considered this proposal, however, and determined that it was not economically feasible.

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25. Minutes of the Seventh Meeting at 152.

26. Norris Hundley, Jr, *Water and the West, The Colorado River Compact and the Politics of Water in the American West* (2nd ed. 2009) at 156 (*Water and the West*). Presumably Carpenter added 310,000 acre-feet to the Colorado water requirements in Table B to reflect existing and expected out-of-basin water uses. During the hearings in Denver, speakers suggested even larger needs. The City of Denver was actively investigating diversions of water from Colorado's West Slope in anticipation of water needs to support its future growth. Irrigation uses on the Front Range had already fully claimed senior water rights on water sources in this part of Colorado.

27. California objected to treating use of Colorado River water in Imperial Valley as interbasin, arguing that the lands in the valley had long been part of the Colorado River delta. Nevertheless, because water taken from the Colorado for use in the valley does not return to the river but to the Salton Sea, Reclamation regards water used in Imperial Valley as out of basin.

28. *Water and the West*, at 159.

Norviel himself had commissioned a survey that came back with the same result. Nevertheless, Maxwell continued to press his case, an idea that eventually found favor with Arizona's governor after completion of the Compact.

The hearings surfaced a variety of ideas intended to find common ground among the states, but none gained broad support. At the conclusion of the final hearing, a frustrated Hoover urged the Commissioners to reflect on the almost certain legal battles that would ensue if they failed to reach agreement.[29] He suggested the Commission take a hiatus to come up with fresh ideas.

Phase Three: Bishop's Lodge

Phil D. Swing. Courtesy of the San Diego History Center.

The Commission did not reconvene for seven months, delayed by Hoover's schedule and a decision to wait until November elections had been completed. During this period two important things happened that encouraged renewed interest in reaching agreement. The first was that Congressman Phil Swing, whose district included Imperial Valley, introduced into Congress the first Swing-Johnson bill authorizing construction of a high dam at or near Boulder Canyon as well as what became known as the All-American Canal.[30] The bill essentially adopted the plan set out in the Department of the Interior's Fall-Davis Report and had Interior's support. Even Hoover spoke in favor of the legislation. Facing the prospect of federal support for increased use of Colorado River water in California, the other states found increased incentive for completing a compact that would help protect their rights.

Perhaps even more important was the long-awaited U.S. Supreme Court decision in the case of W*yoming v. Colorado*, issued on June 5, 1922. The Court determined that, as between states following the prior appropriation doctrine, the Court would use the rule of priority to determine rights to uses of water of interstate rivers.[31] The fear that a rule of priority would be applied to the rights to use the water of the Colorado River Basin had been a concern to Carpenter and others whose states expected slower development of water. The Court's decision made that prospect seem more real. On the

29. I*d.*, at 168.

30. I*d.*, at 169-74.

31. Wyoming v. Colorado, 259 U.S. 419, 470 (1922). The Court further upheld the right to divert water out of basin, finding that the laws of both states allowed this practice. Id. at 466-67.

other hand, the Court's decision allowed Carpenter to jettison his argument that Colorado could use as much water originating or passing through the state as it had beneficial use for. Now he was free to develop other approaches potentially more acceptable to all states.

The Commission reconvened on November 9th at Bishop's Lodge, a resort located outside Santa Fe, New Mexico thought by Hoover to provide the kind of isolation needed for the upcoming negotiations. The only thing that seemed clear at this point was that it would not be possible to apportion water to individual states. The Commissioners knew they needed to find an alternative.

A. Apportionment of System Water

1. By State or By Basin

Perhaps the most difficult issue faced by the negotiators was how to apportion the use of basin water. Efforts to find ways to apportion water to each state had foundered. An alternative approach under which the basin would be divided into two parts, with water apportioned to each rather than to individual states, had emerged during the five-month hiatus.[32] When the Commission finally reconvened, Arizona and Colorado presented two different proposals for resolving the apportionment issue. Arizona once again proposed allowing appropriations of basin water under state law for a period of time to be determined, giving first preference to river control, second to municipal and industrial use, third to agriculture, and fourth to power generation.[33] No provision was made to establish specific apportionments of water or its use.

Then Carpenter introduced a plan for dividing the basin into two parts, using the river crossing at Lees Ferry in northern Arizona as the dividing point and separating the basins along hydrologic lines, with all lands with waters draining into the Colorado River system above Lees Ferry (and including the Paria River that enters the Colorado one mile below Lees Ferry)[34] included in the Upper Basin and all lands draining into the Colorado

32. Reclamation Director Davis had suggested dividing the basin just below the point where the San Juan River entered the Colorado at the hearings held in Los Angeles. Hundley, at 182. He further suggested that all Upper Basin development for the next 50 years would have priority over all Lower Basin development.

33. Minutes of the 11th Meeting, at 12-17.

34. In another of those unfortunate bits of confusion that occur in these kinds of negotiations, the point of division between the two basins is not as clear as would be desirable. As pointed out in Wheeler, et al.,

River below Lee Ferry included the Lower Basin.[35] Each basin would receive the right to use what Carpenter referred to as an "equal division" of the previously determined annual average flow measured at Yuma between 1902 and 1921 of 17.4 maf. [36] The Upper States would commit not to cause a reduction in the average annual flow to the Lower Basin less than 6.264 maf (36% of the annual average Yuma flow) over consecutive ten-year periods (a total of 62.64 maf over each ten-year period) and would agree to provide one-half of the annual requirement for delivery to Mexico if necessary.[37] Carpenter asserted that the Lower States would have use of 8.7 million acre-feet (half of 17.4 maf) (6.264 maf from the Upper Basin and 2.436 maf from

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The Colorado River watershed is administratively divided into two parts—the Upper Basin and the Lower Basin. The dividing point, Lee Ferry, is precisely defined as "a point in the main stream of the Colorado River one mile below the mouth of the Paria River" (Colorado River Compact, Article II(e)). Lee Ferry is approximately 2 miles downstream from Lees Ferry, established in the late 1800s as a ferry crossing (Rusho and Crampton, 1992; Reilly, 1999), and today serves as the launch point for river trips through the Grand Canyon. The Lees Ferry gaging station (USGS gage 09380000) is located upstream from the Paria River confluence and has been operated by the US Geological Survey since 1921 (Topping et al, 2003).

Kevin G. Wheeler, et al, Water Resource Modeling of the Colorado River: Present and Future Strategies 7, White Paper No. 2, The Future of the Colorado River Project, Center for Colorado River Studies, Utah State University (2019). The Compact definition is used here.

35. Minutes of the 11th Meeting at 21-28. Carpenter introduced four important concepts in his proposal that ultimately found their way into the Compact in some form: two basins; apportionment to each basin; 10-year minimum flow at Lee Ferry; and sharing the Mexico burden.

36. Id. at 24 (Article II (1).) Carpenter and his water engineer, Ralph Meeker, calculated that 86 % of the Yuma flows represented water passing Lee Ferry from the Upper Basin and 14% comprised water added from mostly Lower Basin tributaries but also some small Upper Basin tributaries. Carpenter's use of 17.4 maf at Yuma reflected removing the 1902 flows since they only covered nine months of that year, a correction also made in the final Fall-Davis Report. Carpenter's proposal was not clear about how to account for existing uses of water. His "equal division" of the annual average Yuma flow suggests he was only apportioning the remaining unapportioned water.

37. Id. (Article II (2).) Assuming Carpenter intended only to apportion use of unapportioned water, the 17.4 maf average at Yuma did not include the 2.5 maf used in Mexico and Imperial and did not account for the growth in irrigation use between 1903 and 1920. Science Be Dammed, at 43-45.

Lower State tributaries.)[38] The proposal provoked an active discussion that seemed to find general support for the two basin concept, if not the apportionment formula, except with the Arizona Commissioner Norviel who, unsurprisingly, preferred his proposal.

2. The Lee Ferry Flow Guarantee

The matter of how much water to apportion for use in each basin got tangled up in concerns expressed by Norviel about assurances that sufficient water would pass Lee Ferry every year to satisfy demands in the Lower Basin. Carpenter's initial proposal was that at least 62.64 maf would reach the Lower Basin over consecutive 10-year periods, a commitment he said would provide at Lee Ferry 72% of the water to be used in the Lower Basin from the Upper Basin. Norviel imagined that most of this water might come during extremely high flow years, allowing the Upper Basin to use much or most of the available water during low flow years.[39] Commissioner Scrugham proposed adding a provision for an annual minimum flow to the Lower Basin.[40] Discussion turned to whether a commitment in the Compact for construction of storage in the Lower Basin would avoid the need for a minimum flow.[41] At one point the Commission actually accepted a draft Compact provision including a four maf annual minimum, but that agreement soon fell apart.[42]

At the 16th Meeting, Hoover took a different direction—working out the reconstructed average flow at Lee Ferry and dividing the use of that amount 50/50.[43] Carpenter had used the average annual flows (17.4 maf) at Yuma recorded by the USGS between 1903 and 1920. Hoover calculated the average reconstructed flow at Lee Ferry to be 17 maf. He then suggested that the parties use 16.4 maf as a conservative estimate and apportion the use of

38. *Water and the West*, at 185.

39. Minutes of the 11th Meeting, at 46-47.

40. Minutes of the 12th Meeting, at 4.

41. Minutes of the 15th Meeting, at 40 (remarks of Commissioner Norviel.)

42. Minutes of the 22nd Meeting, at 17-18; Minutes of the 23rd Meeting, at 25.

43. It's not clear why Hoover shifted focus to Lee Ferry or why he used the gauges at Laguna instead of Yuma. The shift to Lee Ferry altered the dynamic in the full basin, more firmly separating consideration of uses in the Upper and Lower Basins and decoupling consideration of uses in the Lower Basin tributaries as well as evaporation and river losses in the Lower Basin.

8.2 maf/year to each (instead of the 6.26 proposed by Carpenter).[44] Unfortunately he conflated the apportionment with the guarantee, effectively equating the Upper Basin guaranteed minimum flows of 82 maf over consecutive ten-year period with the 8.2 maf apportionment.[45] He then brought in water needed for Mexico, stating that Reclamation's estimate of total ultimate demands in the Lower Basin of 7.4 maf would leave a cushion of 800,000 for meeting that obligation.[46] Norviel restated the proposal as one also including a minimum annual flow commitment, to which others responded that this proposal had been rejected previously.[47] Hoover suggested basin representatives caucus for additional discussion.[48]

At the next meeting Justice Davis provided the response for the Upper Basin, expressing a willingness to accept a ten-year commitment of 65 maf.[49] Asked by Hoover about a minimum annual flow, Justice Davis responded that their proposal no longer included an annual minimum. Hoover asked about whether the Upper Basin was moving away from Carpenter's proposal of a 50/50 division of basin water. Carpenter responded that the Upper Basin representatives considered it problematic to measure actual uses and preferred an approach under which readily measured flows to the Lower Basin would be guaranteed over ten-year periods, with the Lower Basin able to supplement this supply with uses from their tributaries.[50] Commissioner Emerson expressed his view that this proposal did in fact represent an equitable division of the basin's water supply. Norviel returned to Hoover's recommendation that the flow over ten-year periods had to be at least 82 maf, with a 4 maf minimum. He rejected the view that the Upper Basin might

44. Minutes of the 16th Meeting, at 74-82. Hoover's proposal did not specify whether existing consumptive uses were to be included in the apportionments to each basin.

45. Id. at 82-83.

46. Id. at 82.

47. Carpenter added: "If you crowd us on the minimum we will have to have a protecting clause on precipitation, because we can't control that. Nature will force us into a violation, any possibility of which we should strenuously avoid in our compact, because that would provoke turmoil and strife." Minutes of the 16th Meeting, at 28.

48. Id. at 31.

49. Minutes of the 17th Meeting, at 4. His proposal was based primarily on the first 10-years of recorded flows in which the Upper Basin would have been unable to deliver 82 maf of water.

50. Id. at 5-6. Indeed, Carpenter stated unequivocally that "[i]n effect, this says that so much water shall pass Lee Ferry, and leaves all the flow of the lower streams to the territory in which they arise." Minutes of the 17th Meeting, at 6.

well not be able to ensure that amount of water and claimed there was too little water available in Lower Basin tributaries to make up the difference. The exchanges got heated, with Scrugham finally stating: "If the upper basin will only guarantee 65 million acre feet per year we might as well abandon the discussion." To which Justice Davis responded: "If the lower states are set on eighty-two million, we might as well abandon the discussion."[51] At this critical juncture, Hoover stepped in with a suggestion of 75 maf over ten-year periods. The meeting adjourned to consider this proposal.

3. Agreement on Principles

At the beginning of the 18th Meeting the following morning, Hoover announced overnight agreement on a series of principles:

1. The Colorado River Basin is to be defined as both the hydrologic basin and lands outside the basin to which basin waters are delivered.
2. The Basin is to be divided into an Upper and Lower Division at a point just below the mouth of the Paria River.
3. The compact is to remain in effect for an unspecified number of years at which time the governors of the basin states can reconvene another commission to apportion the use of remaining unapportioned water.
4. Appropriations are limited to beneficial uses, with preference given first to agricultural and domestic uses, second to power, and third to navigation.
5. Each division is to have the right to appropriate up to 7.5 maf during the term of the compact.[52]
6. All rights to agricultural and domestic water appropriated during the life of compact shall vest at the conclusion of compact's term.
7. The Upper Basin shall not cause the depletion of flows at Lee Ferry below 75 maf over consecutive 10-year periods, including an annual minimum of 4 maf.[53]

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51. Id. at 21.

52. This statement was followed by an addition that if one division appropriated more water than the other during the life of the compact, the other division would have the priority right to appropriate additional water in an amount to equal appropriations in the first division, up to the limit of 7.5 maf. The language speaks in terms of authorizing appropriations up to 7.5 maf/year in each basin *during the term of the Compact*. Minutes of 18th Meeting at 23. Read literally, this seems to omit existing appropriations.

53. An additional provision limited the ability of the Lower Basin to demand water that cannot be beneficially applied to domestic and

8. The Mexico "burden," if any, is to be shared equally between the two divisions.
9. A technical commission is to be established for the purpose of collecting data on water use and water flow.
10. Water may be developed in one state for use in another where proper development of the basin requires.[54]

With adoption of these ten principles after extensive discussion and some modification, Hoover raised the question of the termination date of the compact. Agreement was reached on October 1, 1963, a 40-year period.[55] Finally Hoover asked that a drafting committee be appointed.[56]

Members of the Colorado River Commission, in Santa Fe in 1922, after signing the Colorado River Compact. From left: W. S. Norviel (Arizona), Delph E. Carpenter (Colorado), Herbert Hoover (Secretary of Commerce and Chairman of Commission), R. E. Caldwell (Utah), Clarence C. Stetson (Executive Secretary of Commission), Stephen B. Davis, Jr. (New Mexico), Frank C. Emerson (Wyoming), W. F. McClure (California), and James G. Scrugham (Nevada). Courtesy of the Water Resources Archive, Archives and Special Collections, Colorado State University.

agricultural use and a limit on the Upper Basin no to withhold water it cannot apply to beneficial use.

54. After substantial discussion, Hoover suggested a provision under which any questions of this sort arise between two or more states, the governors of the states should be obligated to appoint representatives to seek agreement.

55. Minutes of the Eighteenth Meeting, at 57.

56. Id. at 58.

Clearly the parties had made substantial progress in their evening deliberations about which, unfortunately, we know nothing. Hoover added an important observation:

> In our discussions yesterday we got away from a fifty-fifty division of the water. We set up an entirely new hypothesis. That was that we make, in effect, a preliminary division pending the revision of this compact. The seven and a half million annual flow of rights are credited to the South, and seven and a half million to be credited to the North, at some future day a revision of the distribution of the remaining water will be made or determined.[57]

The sense of having reached agreement quickly dissipated at the next meeting when Norviel discovered that the agreement did not allow the Lower Basin full use of the water of their tributaries.[58] Hoover explained that the apportionment of water applied to the Colorado River system—all the water within the hydrologic basin, including all tributaries. Norviel backtracked further, rejecting the idea that there should be provision for equalization of use if one division reaches its 7.5 maf apportionment before the other.[59] While Hundley states that Norviel's basis for this shift of view was "easy to follow," others might disagree. It seemed to turn on Norviel's view that, with only a legal right to use 7.5 maf total in the Lower Basin, his estimated uses of 3 maf of uses in the tributaries would leave only 4 maf of mainstream water for use—an amount that California could put to use before Arizona could put more of its undefined share of mainstream water to full use.[60] Hoover wisely suggested putting this issue aside and turning to other matters.[61]

The Commission made considerable progress in the next meeting in reaching agreement respecting the purposes of the compact, definitions,

57. Id. at 32.

58. Minutes of the Nineteenth Meeting, at 3-4.

59. The Commissioners discussed at length the idea of authorizing the slower developing basin the ability to have a priority right to appropriate additional water if, at the conclusion of the Compact term, its uses were less than the uses in the other basin. When they agreed to apportion equal amounts to each basin in perpetuity, the need for such equalization disappeared.

60. *Water and the West*, at 197; Minutes of the Nineteenth Meeting at 7-8.

61. Discussion turned to the provision for a procedure under which two or more states might resolve particular differences and the Mexico delivery obligation.

meeting the Mexico obligation, status of tribes under the compact, provision for state-to-state negotiations of differences, and other matters. Progress foundered, however, when the matter of whether to include a provision requiring construction of storage before the compact would become effective was considered.[62]

4. Apportionment of Beneficial Consumptive Uses between Basins

The Commission then returned to the matter of finding agreement respecting apportionment of basin water. Hoover prefaced the discussion with reference to a growing awareness among Commission members that there did not exist sufficient reliable information to come up with a 50-50 split of all system water.[63] In consequence, the Commissioners were coming around to the view that there should be a preliminary division of a portion of basin water authorizing appropriation and use of this amount of water for the term of the Compact and then providing for subsequent additional appropriations at a later date.[64]

Remembering that Reclamation's original estimates of ultimate water uses in Arizona had not included all lands in the Gila and Little Colorado Basins,[65] Norviel asked Reclamation Director Davis to come up with a determination of ultimate requirements in the entire Lower Basin that

62. Minutes of the Twentieth Meeting, at 110-11. Hoover pressed the Upper Basin representatives to consider the concerns of Imperial Valley users about ensuring the availability of flows in the low-flow seasons, a problem that could be addressed if storage were available.

63. Minutes of the 21st Meeting, at 127:

> At one time we revolved around the problem of a fifty-fifty division. We finally reached, in effect, this general conclusion as to the form of the compact, and that was that none of the figures and data in our possession, or within the possibility of possession at this time were sufficient upon which we could make an equitable division of the waters of the Colorado River, —

64. Id.

65. Reclamation's Davis appeared to be conflicted respecting whether to include the Gila Basin in the Fall-Davis Report. Reclamation had already constructed the Salt River Project and had plans for additional water development in-basin. Davis seemed to want to exclude the Gila, an impossibility in view of the definition of the Colorado River System as including all basin tributaries. Asked by Hoover to include consumptive uses in the Gila as part of reconstructing the virgin flow at Lee Ferry, Davis asked: "Did you want to include the flow of the Gila as well." Hoover responded: "It's part of the drainage basin." Minutes of the 18th Meeting, at 81,

included these additional lands—an amount Davis determined to be 7.68 maf.[66] On this basis, Norviel proposed a division of basin water with 44.5% going to the Upper Basin and 55.5 % to the Lower Basin.[67] At this point Scrugham offered three options to try to reach agreement:

1. Permanent apportionment of 7.5 maf of beneficial consumptive use to each basin;
2. Development in each basin until one reaches 8.5 maf, 1.0 maf more than the basic apportionment; No provision for equalizing between the divisions when the maximum of 8.5 maf is reached in one; and
3. Permanent apportionment of 7.5 maf to each division, with an additional 1.0 maf to the Lower.[68]

When the Commission met again in formal session a day later, the third suggestion had been incorporated into Articles III (a) and (b) of the draft compact.[69] Moreover, the language of Article III (a) had been revised to make express that the apportionments were perpetual, of beneficial *consumptive* use, and included water necessary for all existing rights.[70] We do not know why Norviel decided to accept this approach while apparently giving up on his efforts to preserve full use of the tributaries in Arizona. Hundley speculates that, in part, he was simply worn down.[71] More objectively he suggests that Norviel believed Arizona's interests were protected with the addition of 1.0 maf more consumptive use for the Lower Basin, especially when coupled with the assurance of at least an average of 7.5 maf passing Lee Ferry each year into the Lower Basin. As we shall see, Norviel did not foresee the opposition to this formulation that would arise in Arizona.

5. Preferred Beneficial Consumptive Uses

Based on provisions in their own state laws, the Commissioners had somewhat different ideas about which uses should be accorded preference. Eventually the parties agreed that domestic and agricultural uses should

66. Minutes of the 21st Meeting, at 128, 129.

67. Id. at 128.

68. Id. at 129-30.

69. Minutes of the 22nd Meeting, at 136-37.

70. The effect of including existing uses within the apportionments and specifying that the quantities represented consumptive uses, not appropriations, had the further result of reducing the total amount of water being apportioned under the Compact.

71. *Water and the West*, at 198.

have preference over uses for power generation. More boldly, the Commissioners decided that uses of water for navigation should be subservient to all three of these uses. By definition, the Commissioners declared that domestic uses include "household, stock, municipal, milling, mining, industrial, and other like purposes," but do not include power generation.

6. Out of Basin Uses

Reclamation's original study had focused almost solely on uses of water for irrigation on lands within the hydrologic basin. Representatives for Colorado and Utah reminded the Commissioners that water was already being exported from the hydrologic basin, including through a Reclamation Project (Strawberry Valley). At the Denver hearings, speakers suggested significant additional exports would be needed for use on Colorado's Front Range. Given the fact that Imperial Valley was technically outside the hydrologic basin, the parties soon agreed that such out-of-basin uses would be contemplated under the Compact. They enshrined this understanding in the definition of the Colorado River Basin as including all lands in the United States to which waters of the system are beneficially applied.

7. Compact Term and Additional Apportionment

As the Commissioners began to think in terms of this compact simply being an initial apportionment of basin water uses, recognition emerged that there needed to be a mechanism under which remaining unapportioned water could be divided. For a while the Commissioners explored the idea of enabling the slower developing basin to have priority to develop additional water before the faster developing basin could place additional water to beneficial use. However, once the parties agreed that the basin apportionments were fixed and perpetual, that concern went away. Instead the parties settled on a compact term of 40 years, ending on October 1, 1963, at which point additional apportionment could occur.

B. Water for Mexico

The Commissioners struggled over several sessions with how best to acknowledge uses of water on lands in Mexico. Clearly there was not much interest in explicitly recognizing Mexico's legal rights to use basin water, much less to express a view as to how much water that might be. The Mexico problem was complicated by the fact that much of the irrigable land in Mexico at that time was owned by American interests.[72] Moreover, to be

72. Minutes of the 6th Meeting, Table A, at 70. Since Mexico held a contract right to use up to half the water available in the delivery system

able to use channels in Mexico for delivery of water to Imperial Valley, the American developer had entered a contract under which up to half the water diverted into Mexican channels would potentially be usable in Mexico. Reclamation had analyzed use of water in Mexico in its Fall-Davis Report, identifying existing uses of 836,000 acre-feet and probable additional requirements of 2.684 maf.[73]

When the Upper and Lower Divisions started bargaining about guaranteed minimum flows passing Lee Ferry, Hoover asked whether the Upper Basin would be willing to accept responsibility for meeting future Mexico obligations. Carpenter demurred.[74] Yet Carpenter's proposal for apportioning basin water included an express willingness on the part of the Upper Basin to share equally in meeting the Mexico "burden."[75] Eventually the Commissioners reached agreement on language deferring judgment as to whether the United States had a legal responsibility to deliver water to Mexico.[76] At Hoover's suggestion, they decided that any such obligation should come first from water surplus to that apportioned by the Compact and then, if surplus water were insufficient, shared equally by the two divisions. Hundley is emphatic that the Upper Basin did not commit to providing additional water that might be needed to offset evaporation and channel losses in the Lower Basin.[77]

C. Storage in the Lower Basin

Reclamation Director Davis and Herbert Hoover strongly supported construction of water storage in the Lower Basin throughout the negotiations.[78] Initially their support turned mostly on the need for flood

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moving water through Mexico to Imperial, these estimates might have assumed irrigators in Mexico taking a much larger share of water when upstream storage regulated flows enabling greater wintertime deliveries. Of course, the All-American Canal was envisioned as the means for avoiding this contract obligation with Mexico.

73. Minutes of Sixth Meeting, at 70 (Table A.)

74. Minutes of the 17th Meeting, at 18.

75. Minutes of the 11th Meeting, at 24.

76. Minutes of 20th Meeting, at 53-54, 62.

77. *Water and the West*, at 204, footnote 77.

78. Hoover's position on whether the dam should be "high" or "low" remained vague during the negotiations (he favored a smaller dam for flood control purposes primarily). Eventually he came around to favoring construction of a high dam that could store large amounts of water and produce substantial hydroelectric power. There also was strong disagreement whether the dam(s) should be built by private or public

protection, especially for Imperial Valley. Hoover favored including a provision directly in the Compact calling for such a project, even suggesting the Compact not go into effect until storage was built. Upper Basin Commissioners opposed including any such provision in the Compact. While expressing sympathy for the problems affecting Imperial that storage would help, they felt that any such project was a matter for those who would benefit to work out.[79] Eventually Hoover took a more direct approach, explaining to Carpenter how the lack of storage directly impaired the ability to divert water into Imperial during the wintertime low-flow period—a problem certain to increase as the Upper Basin started storing water in the winter months.[80] Imperial Valley representatives turned on McClure for, in their view, his failure to protect their interests.[81] Aided by Hoover's intervention, the California parties developed a proposal they believed would protect their interests while not provoking Upper Basin opposition. It called for the protection of present perfect rights[82] and added that "whenever works of capacity sufficient to store 5,000,000 acre feet of water have been constructed on the Colorado River within or for the benefit of the lower basin, any rights which the users of water in the lower basin may have against the users of water in the upper basin shall be satisfied thereafter from the waters so stored."[83]

D. Dispute Resolution Provision

As occasional issues arose that could not be resolved with the Compact, the Commissioners recognized the need for a mechanism under which individual states could work out disagreements without the need to go to court. Among the potential issues were (1) questions about waters of the Colorado River System not covered by the terms of the compact, (2) the meaning or performance of any of the terms of the compact, (3) the allocation of the burdens imposed under any compact provision, (4) construction or operation of water storage facilities located in one state for

interests. Reclamation's Davis, of course, favored federal construction as well as federal operation of the hydroelectric power facilities.

79. Minutes of the 21st Meeting, at 16.

80. Imperial was fully prepared to go to court to protect their senior rights to divert and use winter water.

81. This side story is relayed in *Water and the West*, at 208-09.

82. Later defined as "perfected rights, ..., existing as of June 25, 1929, the effective date of the Boulder Canyon Project Act; ...." *Arizona v. California*, 376 U.S. 340, 341 (1964).

83. Minutes of the 23rd Meeting, at 6-7.

the benefit of another, or (5) the diversion of water in one state for the benefit of another states.[84]

E. Water for Tribes

Relatively late in the negotiations, Hoover raised the matter of how to address tribal interests in the Compact. It seems clear that this was a matter of little interest to the Commissioners, including Hoover. Ultimately the Commissioners left this matter in the hands of the federal government, stating that "[n]othing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes."[85]

F. The Conclusion

The Commissioners met a final time on Friday afternoon, November 24, 1922, its 27th meeting. Surprisingly, the minutes reflect little excitement among commission members, more a feeling of wrapping up a long and difficult process. Only Carpenter engaged in the kind of encomiums that often mark successful completion of such difficult negotiations. As befits the Silver Fox of the Rockies,[86] he expressed his appreciation for dealing with a group of honest men, men of character with whom it was unnecessary to search for lies or misdealings.[87] He expressed special thanks to Hoover to whom "is due the great measure of the credit for making possible this successful conclusion."[88] Taking note of the engineering and law backgrounds of the Commissioners, Carpenter deemed the group a "happy combination" and concluded: "…the most valued thing from a personal point of view that can come out of these associations is the feeling that you have left behind – a sense of friendship as well as accomplishment."[89] With significant understatement, the Minutes then state: "It was then moved, seconded and unanimously adopted the Compact as engrossed. It was then

84. Colorado River Compact, Article VI. This provision has never been used.

85. Colorado River Compact, Article VII. Initially the proposed language stated: "Nothing in this compact shall be construed as effecting [sic] the rights of Indian tribes." Minutes of the 18th Meeting at 89.

86. Daniel Tyler, Silver Fox of the Rockies: Delphus E. Carpenter and Western Water Compacts (2003).

87. Minutes of the 27th Meeting, at 304-05.

88. Id. at 303.

89. Id. at 305.

moved, seconded and unanimously carried, that the Commission adjourn and proceed to the City of Santa Fe, where the compact should be signed."[90]

Ratification

Initial Promise

Article XI provided that: "This compact shall become binding and obligatory when it shall have been approved by the Legislatures of each of the signatory States and by the Congress of the United States." When the Commissioners returned to their states seeking that approval, they generally met with a favorable reception.[91] Despite some questions about the adequacy of the water supply and the failure to apportion water to each state, by early 1923 six of the seven basin states, including Arizona, had approved the Compact.[92] Colorado did not reach agreement until shortly thereafter, by which time Arizona had decided to go its own way.

The Arizona Saga

The election of George W.P. Hunt as Arizona governor in the fall 1922 elections dramatically altered the political landscape in Arizona and raised serious questions about State support for the Compact.[93] Hunt expressed grave reservations about the Compact when he presented it to the legislature for review in 1923. Hunt's views were heavily influenced by those of George Maxwell, in particular his proposal to take water from the main Colorado River and move it to the central part of the state where most of irrigable lands were located.[94] Ultimately, the Arizona legislature failed to ratify the compact in its 1923 session.

The following year Hunt appointed a committee to help develop a plan for Arizona's development and use of the Colorado River. By this time, Hunt had become convinced that the system's water supply had already been fully allocated and that, without full use of its tributaries, Arizona would not have enough water. His attention turned to the potential benefits of hydroelectric power generation, beginning with a dam at Glen Canyon. He aggressively opposed the so-called Swing-Johnson bill that would authorize construction of a dam at Boulder Canyon and the All-American Canal. His fears of California grew when the City of Los Angeles announced its plans for taking

90. Id.
91. This story is told in greater detail in *Water and the West*, chapter 8.
92. Beverly Bowen Moeller, Phil Swing and Boulder Dam (1971) at 42.
93. *Water and the West*, at 232.
94. Id. at 237.

water from the main Colorado River to that rapidly growing city. Hunt was reelected in November 1924.

With prospects for Compact ratification rapidly diminishing, Delph Carpenter conceived the idea of a six-state compact. Agreement on this change required approval of the six state legislatures, a process that moved surprisingly quickly.[95] Hunt continued to oppose the Compact and, as differences between Arizona and California continued to grow, the Upper Basin states feared the Compact would be lost. Having discovered its interests in benefiting from power generation at facilities expected to be located at least in part in its state, Utah withdrew its approval of the Compact in January 1927. Lobbied by its Upper Basin neighbors, Utah offered to organize a conference in an attempt to find agreement for a seven-state compact.

Held in Denver beginning in August 1927, the conference centered on ways to satisfy Arizona that would be acceptable to California. The key seemed to be reaching agreement on an apportionment of the water of the main Colorado River among Arizona, Nevada, and California—assumed to be 7.5 maf/year. The Upper Basin governors suggested apportioning 300,000 to Nevada, 4,200,000 to California, and 3,000,000 to Arizona.[96] Neither Arizona nor California would accept this arrangement so the conference ended without progress.

The signing of the Colorado River Compact in 1922, with Herbert Hoover, the Secretary of Commerce at the time, serving as the chairman. Courtesy of the U.S. Bureau of Reclamation.

95. Id., at 254. California muddied the waters by adding a reservation requiring that its approval of the Compact was contingent on the construction of at least 20 maf of storage in the Lower Basin.

96. Id., at 265.

Attention then shifted to the 4th Swing-Johnson bill, introduced to Congress in 1927.[97] Upper Basin representatives insisted that California accept a limitation on its use of the Article III (a) apportionment of 7.5 maf/year, an amount finally determined to be 4.4 maf. Unhappily, California acceded. Congress then went further in an effort to lure Arizona into ratifying the Compact by pre-approving a three-state compact among Arizona, California, and Nevada by which Arizona would get 2.8 maf of what the legislation termed Article III (a) water (but seemed to mean mainstream Colorado River water) as well as de facto rights to use all waters in the Gila Basin.[98] Congress finally enacted the Swing-Johnson bill in December 1928, providing six months within which the states would have to give final approval to either a six or seven state compact and California would have to accept the 4.4 maf limitation.[99] With those two conditions met, President Herbert Hoover proclaimed the Act effective on June 25, 1929.

The Colorado River Compact: A Critical Appraisal

Any legal document in effect for 100 years is sure to show its age, and the 1922 Colorado River Compact is no exception. Even before the Compact became effective, academics were offering ideas for its modification.[100] The Compact's failure to settle apportionments of system water among the individual states led to 40 years of disputes and U.S. Supreme Court litigation between Arizona and California, causing the Colorado to be viewed as the most litigated river basin in the world. And yet, the Compact enabled unparalleled development and use of the basin's water resources, helping fuel growth and development in a previously undeveloped part of the country. It allowed development initially in rapidly growing southern California without opposition from the Upper Division states who now had the assurance of the perpetual right to use of a large share of the system's water. It cleared the way for a newly emergent Bureau of Reclamation to undertake an extraordinary engineering accomplishment with the construction of Hoover Dam, to install and operate hydroelectric power generators at the dam, and to use the revenues from sales of power to pay the costs of dam construction and operation—a model that it followed throughout the West. Occurring during the Depression, the political support

97. Swing had added a provision authorizing congressional approval of the Colorado River Compact to his 3rd version, introduced in 1925, but the 4th version added several other important modifications favored by the basin states.

98. *Water and the West*, at 269.

99. Boulder Canyon Project Act, Public Law 642, 70th Congress, 43 U.S.C., Chapter 12A.

100. Reuel Leslie Olson, The Colorado River Compact (1926).

for governmental action to promote economic development marked a new departure for a country that had long been skeptical of giving this role to government. The fact that the remarkable edifice of treaties, compacts, laws, and regulations built on top of the 1922 Compact is known simply as the "Law of the River" speaks of its iconic status.

So how do we evaluate the Compact at 100? A relic in dire need of replacement? A venerable document that has outlived its usefulness? A document in clear need of revision? A flawed but still essential part of the Law of the River? A document so embedded in the Law of the River as to be incapable of direct revision? Let's examine its many criticisms.

Water Supply. The Commissioners have been criticized for basing their negotiations on mistaken information about the basin's water supply.[101] But they reasonably relied on the information provided by the U.S. Geological Survey and the Reclamation Service—the expert agencies.[102] Certainly they had reason to want to hear that there was an abundant water supply that could, if properly developed and managed, meet all foreseeable water needs. Ultimately, they made their apportionments on what they believed to be the conservative basis of 15 maf rather than on uncertain assumptions about the total water supply. The Commissioners included existing uses throughout the basin in its apportionments—an amount calculated by Reclamation to be more than 5 maf.[103] And they prudently defined

101. Science Be Dammed, at 45. During the negotiations there was no contrary evidence presented to the Commission. When the USGS's LaRue started getting attention for his questions about the adequacy of the water supply, the process had moved into ratification—a difficult time to entertain new ideas about how much water would be available. Similarly, when the report of the Colorado River Board raised a red flag about the assumed water availability at Black Canyon, the Swing-Johnson bill was nearing passage in Congress—too late for second thoughts. Report of the Colorado River Board on the Boulder Canyon Project, H. Doc. 446, 70th Cong., 2d Sess. (1928). Congress had directed this study the previous year to address questions about the project's feasibility. The report strongly endorsed construction of the project while cautioning that the reconstructed flow at Lee Ferry might be one maf less than previously estimated.

102. It bears remembering that, as late as 1946, the Interior Department estimated "virgin" flows of the Colorado River system at the international boundary with Mexico as 17.72 maf. Department of the Interior, The Colorado River: "A Natural Menace Becomes a National Resource: a General Plan for the Development and Utilization of the Water Resources of the Colorado River Basin for Irrigation, Power Production, and Other Beneficial Uses in Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming" 284 (1945).

103. Minutes of the 6th Meeting, Table A.

apportionments in terms of consumptive use, not diversions. They can hardly be faulted for failing to foresee climate change.

Water Requirements. Perhaps the Commissioners' most serious failure in the negotiations was their unwillingness to take a realistic view of the potential for irrigation and other water development in their states. By inflating the acreage likely susceptible to irrigation in their states, they made it impossible to reach agreement on a state-by-state apportionment of water use, even with an overly optimistic view of system water supply. Only Commissioner Caldwell seemed willing to acknowledge the game the Commissioners were playing, but even he was unwilling to reduce his own inflated estimates.[104] The ensuing battles between Arizona and California over rights to the Lower Basin's apportionment were a direct result.[105]

Tributary Water. Another source of criticism is that the Compact left uncertain uses from the Gila River and other lower basin tributaries. But, in fact, the Compact is quite clear that its apportionments apply to all the water of the Colorado River system—that is, the main river and all its tributaries. The Compact contains no suggestion that the 7.5 maf apportioned to the Lower Basin under Article III (a) was water of the main Colorado River. That was a misunderstanding that began with the Governor's conference at Denver in 1927, continued with Congress in the final amendments to the Boulder Canyon Project Act in 1928, and was mistakenly adopted by the U.S. Supreme Court in its 1963 *Arizona v. California* decision.[106] It was a conflation of the annual average of 7.5 maf/year that would pass Lee Ferry annually under Article III (d) with the 7.5 maf/year apportioned to the Lower Basin in Article III (a). Under the terms of the Compact, the beneficial consumptive uses of 7.5 maf/year apportioned to the Lower Basin under III (a) applies to any and all uses of system water in the Lower Basin.

Article III (b). The same analysis applies to the source of the water apportioned to the Lower Basin in Article III (b). While the Commissioners added this provision to satisfy Arizona's concerns, it was in no way tied to

104. Minutes of the 7th Meeting at 92. Commissioner McClure of California was the only one who didn't challenge the water requirements determined by the Reclamation Service, probably because Reclamation had completed a detailed survey of irrigation potential in California. Reclamation Service, Problems of Imperial Valley and Vicinity, February 28, 1922.

105. *See Water and the West*, ch. 9, at 282-295.

106. For a more detailed discussion reflecting this confusion, see Lawrence J. MacDonnell, *Arizona v. California* Revisited, 52 Natural Resources Journal 363, 386-97 (2012) (Special Master's Analysis). *See also* Norris Hundley Jr., Clio Nods: Arizona v. California and the Boulder Canyon Act—A Reassessment, 3 Western Historical Quarterly 17 (1972).

Arizona's desire to have unlimited use of its tributaries, including the Gila. It was simply an effort to ensure the Lower Basin would have the legal right to consumptively use enough water to meet total estimated needs. Here the problem can be traced back to congressional efforts to entice Arizona to ratify the Compact by inserting a proposed compact in the Boulder Canyon Project Act with a provision expressly stating "that the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of said State …."[107] This would, of course, only have happened if California had agreed to the three-state compact, a highly unlikely outcome. Nevertheless the U.S. Supreme Court decided that Congress itself had apportioned the Lower Basin's Article III (a) water in the BCPA, pointing in part to the apportionment made in the proposed three-state compact.[108] In short, the confusion about how to account for tributary water uses traces back to A*rizona v. California*, not the Compact. The disparity can only be explained by saying the U.S. Supreme Court effectively amended the Colorado River Compact.

Water for Losses. It is true no provision was made in the Compact for evaporation and other losses of water. In the context of considering a system thought to have surplus water, especially once storage facilities were built to store high flows, it is not surprising there was no such provision. Remember, there was very little storage of system water in 1922 and no certainty about future development. The Fall-Davis Report estimated future reservoir evaporation of about two maf/year and subtracted that amount from its calculation of water availability at Boulder Canyon.[109] Evaporation losses only emerged as a serious concern when storage levels reached up to 60 maf, causing one expert to conclude that any additional storage of water in the system would result in a net loss of water.[110] To the degree the Commissioners considered how to account for these losses it seems they were of the view that inflows from tributaries in the Lower Basin would offset losses.

Lee Ferry Flows. As Lower Basin representatives, primarily Norviel and Scrugham, gradually came around to the idea of some form of a fifty-fifty split of basin water, they grew more insistent that the Compact contain provisions ensuring flows of water from the Upper Basin. The fear was that, since some 90% of the system's water originated in the Upper Basin, these states might somehow be able to hold back water or use water in times of drought in a way that would jeopardize the Lower Basin's ability to make full use of its apportionment. The Upper Basin initially offered to guarantee that

107. Boulder Canyon Project Act, Section 4 (a).

108. Arizona v. California, 363 U.S. at 569, 573.

109. Fall-Davis Report, at 36-37, Tables 8 & 9.

110. Walter B. Langbein, Water Yield and Reservoir Storage in the United States, Geological Survey Circular 409 (1959) at 4.

65 maf would reach the Lower Basin over consecutive ten-year periods. Hoover suggested 82 maf. Norviel resisted the ten-year period, wanting a much shorter time period. He also wanted an annual minimum flow. This impasse threatened to derail the negotiations.

Hoover's suggestion of 75 maf worked to bring the parties together, but it is worth noting this suggestion favored the Lower Basin, requiring flows of 10 maf more over 10 years from the Upper Basin than its proposed 65 maf while the Lower Basin gave up only 7 maf from its 82 maf proposal. But the Upper Basin took away its offer of allowing the Lower Basin states free use of their tributary water, and it avoided any requirement for a minimum annual flow in any given year. So, it seems a fair trade. The Lower Basin also got new language that become Article III (e): "The States of the Upper Division shall not withhold water, and the States of the Lower Division shall not require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses."

Climate Change**.** There is no doubt the Lee Ferry flow requirement now has the effect of placing most of the burden of climate change on the Upper Basin. On its face it appears an inflexible obligation, but like so much else in the Law of the River, it is a provision subject to interpretation and modification. The Minutes reflect Commissioner Carpenter's uneasiness with making what seemed a guarantee of a minimum flow that nature might make impossible to meet.[111] Indeed, that is exactly what has happened. As Eric Kuhn points out, we have gone from a river that seemed to provide an average of 20 maf/year to one that now averages around 13 maf each year.[112] Clearly no one could have anticipated this dramatic decline in system water availability. A good case can be made that these consequences of climate change constitute an "Act of God,"—that is, an unforeseeable natural event that could not have been prevented with reasonable diligence and that makes impossible the fulfillment of some contract provision.[113] We have not yet reached that point, thanks almost entirely to the massive amount of

111. "If you crowd us on the minimum we will have to have a protecting clause on precipitation, because we can't control that. Nature will force us into a violation, any possibility of which we should strenuously avoid in our compact, because that would provoke turmoil and strife." Minutes of the 16th Meeting, Colorado River Commission, November 14, 1922, at 28.

112. Eric Kuhn, "The Consequences of the Compact Remain with Us"- Challenges and Opportunities for the Upper Basin 4, Draft *Science Be Dammed* Working Paper # 3 (3/7/2022).

113. *See* Lawrence MacDonnell, Sources of Controversy, Colorado River Working Paper (June 25, 2021). Available at SSRN: https://ssrn.com/abstract=3874212 or http://dx.doi.org/10.2139/ssrn.3874212

storage existing in the basin, but neither are we far removed.[114] Almost certainly, basin interests will search for some way to made the Lee Ferry flow obligation adjustable according to actual water availability and actual needs in the Lower Basin.[115]

Though Upper Basin interests don't like to acknowledge it, the 50-50 division of 15 maf of annual consumptive use was unusually favorable to their interests. All parties looking objectively at the future demands in the two basins believed the uses in the Lower Basin would considerably exceed those in the Upper Basin.[116] First to reach that conclusion was the Reclamation Service in the Fall-Davis Report.[117] Then, during the Compact hearings, two scientists from the USGS suggested a 65/35 split of system water based on their analysis of most likely future uses.[118] When, at Norviel's request, Director Davis added expected uses in the Arizona tributaries to the previous analysis of future needs in the Lower Basin, Norviel calculated that a fair split would be 55.5/44.5 in favor of the Lower Basin. Some have expressed the view that the Compact does not in fact make an equitable division of the system's water, especially in view of the Lee Ferry flow requirements. I find no basis to support this view. It was Carpenter who planted the seed of a 50/50 division, though his approach would have divided all remaining system water at Yuma. Hoover seemed to recognize the attraction of some kind of 50/50 division. While we don't have information about the private discussions that produced agreement on using a presumptively conservative total of 15 maf to be divided equally, we do have Hoover's statements about how this approach represented an entirely new way of apportioning the system water, a way that presumed

114. Kuhn suggests perhaps 4-5 years from 2022. Working Paper #3 at 6.

115. Kuhn offers three possible scenarios: status quo; resistance/litigation; and a new agreement. Id. at 8-11.

116. No one, however, anticipated how substantially imbalanced Lower Basin uses would become in relation to Upper Basin uses. While we don't have current official figures on consumptive uses in the full Lower Basin, as we headed into the 21st century drought, consumptive uses in the Lower Division states averaged nearly 10 maf/year between 2001 and 2005 while consumptive uses (not counting evaporation) in the Upper Division states averaged 3.8 maf/year during this period. Bureau of Reclamation, Colorado River Consumptive Uses and Losses Report, 2001-2005, Table Summary at iv.

117. Initial estimates by Reclamation were that existing and future consumptive water uses in the four Upper states were about 6.3 maf/year and existing and future uses in the three Lower states were about 7.7 maf/year. Minutes of the 6th Meeting, Table A at 70.

118. *Water and the West*, at 167.

there would be surplus water available for future apportionment so that whichever basin ultimately needed additional water would have the ability to come back later and get that water.

Water for Mexico. Congress directed the Colorado River Commission to equitably apportion the Colorado River system's water among the seven basin states. The Commission had no authority to decide how much water to apportion to Mexico. Nevertheless, the Commission spent a great deal of time debating the Mexico water delivery obligation while being careful not to expressly acknowledge that such an obligation existed. Reclamation's Table A, provided to the Commissioners in the sixth meeting, suggested that Mexico was currently using about 800,000 acre-feet of water per year and could potentially use about 2.7 maf more.[119] Mexico sought to participate in the Colorado River Compact discussions, arguing that it should be party to any apportionment of basin water.[120] Try as they might, the Commissioners could not avoid dealing with the question of water for Mexico. Ultimately the Compact treated the obligation very circumspectly, noting only that, should such an obligation be determined to exist "as a matter of international comity," the burden would be met first out of surplus water and then, if that water proved insufficient, shared equally between the two basins. When it became clear there was no surplus water, the two basins began to disagree about the precise meaning of equal sharing, with the Lower Basin arguing this burden obligated the Upper Basin to deliver not only its half share but also the associated share of evaporation and river channel losses. This dispute boiled over in 2004 when the Upper Basin resurrected its longstanding view that, in fact, it had no responsibility for providing one half the Mexico obligation so long as the Lower Basin consumed more than its 8.5 maf Article III (a) & (b) Compact apportionment.[121] This is a disagreement in need of negotiation and

119. Minutes of the Colorado River Commission, Meeting No. 6, January 28, 1922. The basis for these numbers is unclear. It is striking that the Fall-Davis Report includes consideration of Mexico demands in the same manner as demands in the United States. Perhaps this treatment reflected the deeply embedded relationship at that time between water uses in this portion of Mexico and in Imperial Valley. It may also reflect the reality that, at that time, most irrigable lands in this part of Mexico were owned by American interests.

120. Norris Hundley, Jr., Dividing the Waters (1966) at 54 (Dividing the Waters.) The United States resisted these requests, insisting the negotiations were an entirely domestic matter. Nevertheless, there was growing recognition that an agreement with Mexico would be needed.

121. For a more complete discussion of this dispute, see Sources of Controversy, at 16-22.

resolution, but it can hardly be blamed on faulty draftsmanship in the Compact.

With water for Mexico continuing to raise concerns among basin interests, the United States decided to pursue formal negotiations in 1929.[122] With the benefit of more careful engineering studies, Reclamation determined that Mexico had used a maximum of 750,000 acre-feet per year of Colorado River water in previous years and offered that amount in the negotiations. Mexico rejoined with a demand for 4.5 maf/year. Unsurprisingly, the negotiations were unsuccessful. There was considerable concern that a dam in the United States would enable increased uses in Mexico by making more water available in the winter months. Language was included in the Swing-Johnson bill stating that water stored in the bill's proposed reservoir could only be used in the United States.[123]

Tribal Water Needs. This is one of many of the contemporary critiques of the Compact that relies on present day views more than the reality of the

Engineers and politicians view site of the Hoover Dam at Black Canyon, c. 1928. Courtesy of the Historical Photo Collection of the Department of Water and Power, City of Los Angeles

122. Dividing the Waters, at 68.

123. Boulder Canyon Project Act, Public Law No. 642-70th Congress, Sec. 1: "That for the purpose of controlling the floods, improving navigation and regulating the flow of the Colorado River, providing for storage and for the delivery of the stored waters thereof for reclamation of public lands and other beneficial uses *exclusively within the United States*, …." (emphasis added).

1922 American West. Water experts in 1922 were fully aware of the U.S. Supreme Court's decision in W*inters v. United States*[124] and its holding that tribes hold a reserved right to use water necessary to maintain a homeland, but the holding seemed only to imply a burden on the United States to protect tribal interests in situations like that in W*inters* in which non-reservation water development threatened the ability of the United States to develop the water necessary to enable Indians to live on reservations. The reserved rights doctrine had not yet been applied affirmatively, certainly not by tribes.

Again, much progress has been made in recent times to address tribal reserved and other water rights, to provide the financing necessary for tribes to make use of those rights, and to more actively seek to include tribal representatives in water decision making that affect tribal interests. The failure was not with the Compact, but the general understanding that prevailed in 1922 that tribal concerns were federal concerns, not involving the states.

Environmental and Recreational Uses of Water. Once again, this is a contemporary critique based on contemporary values not at the fore in 1922. Laws and programs developed at the federal level in the past 50 years have done a great deal to remedy this shortcoming in our earlier view of the value and importance of water.[125] Much of our contemporary water management in the Colorado River system turns on trying to moderate or compensate for the dramatic effects on river ecology caused by more than 70 years of almost nonstop water development and use, featuring a massive system of storage reservoirs that has transformed large reaches of river into totally different ecosystems.

A Permanent Colorado River Commission. This critique has been far and away the most popular among academics, including myself.[126] The first academic to offer this recommendation was writing even before the Compact had been approved. Reuel Leslie Olson published his Harvard History Ph.D. thesis as a book in 1926, providing a thorough analysis of compact negotiations and provisions.[127] In his conclusion he suggested the creation of a "Colorado River Authority" for the purpose of ongoing management of the "many engineering, economic, constitutional, legal, political difficulties" he discussed in his book.[128]

124. 207 U.S. 564 (1908).

125. These programs are discussed in Colorado River Basin at CORB-34-42.

126. MacDonnell and Driver, Rethinking Colorado River Governance, Proceedings, The Colorado River Workshop (1996) at 181-212.

127. Olson, The Colorado River Compact.

128. Id. at 195.

From time to time during the negotiations, the idea of some kind of permanent body emerged, particularly as a possible way to defer decision making about apportionments of water to states. Delph Carpenter was most clearly opposed. As a Coloradan he viewed state control of water use decisions within its borders as paramount. As a conservative, he disliked the idea of establishing some kind of formal multi-state governmental entity with undefined powers and authority. Rather, he favored establishing a technical group strictly for the purpose of gathering information about water use and for monitoring flows at Lee Ferry. This view became incorporated in the Compact's Article V.[129]

There may have been some reason to regret not establishing a commission as Arizona and California battled over and over again in the U.S. Supreme Court. But eventually what emerged was a de facto governance system, including representatives from each of the basin states, often representatives from the largest water user entities, and representatives from Interior and Reclamation. The formality of these groups waxed and waned depending on the issues under consideration, but at all times there was a relatively small group of people who served as the instrument for negotiating differences and seeking agreement. Inevitably the groups tended to sort out as Upper and Lower Basin because many of their interests depended on which basin they represented. Increasingly, the Bureau of Reclamation shifted its role from project developer to water manager and technical expert, serving first as staff to its bosses in Interior but also to the state representatives and the public when they needed additional information and expertise.

Clearly these de facto groups were narrowly based, serving the basin's predominant interest in consumptive use of water for agriculture, industry, and urban needs. Power interests often had a seat at the table if matters of power generation were involved, but few if any other interests were consulted. Gradually, basin decision making has become more structured,

129. "The chief official of each signatory State charged with the administration of water rights, together with the Director of the United States Reclamation Service and the Director of the United States Geological Survey shall cooperate, ex-officio:

(a) To promote the systematic determination and coordination of the facts as to flow, appropriation, consumption, and use of water in the Colorado River Basin, and the interchange of available information in such matters.

(b) To secure the ascertainment and publication of the annual flow of the Colorado River at Lee Ferry.

(c) To perform such other duties as may be assigned by mutual consent of the signatories from time to time."
1922 Colorado River Compact, Article V.

more formalized, in part because federal involvement required meeting NEPA standards for public involvement and decision making. In my view, the states themselves started to take a more broad-based view of their role during the 1990s with efforts to get California to gradually reduce its consumptive uses to 4.4 maf/year.[130] Working with Interior and Reclamation to implement the agreement the states had reached, the interests recognized the power of cooperative decision making. When an unprecedented drought overtook that effort and the states threatened to return to their old, bad ways, the spirit of cooperation reemerged in the form of Interim Guidelines under which, for the first time, water deliveries from the main Colorado River in the Lower Basin were made not on the basis of an assumed fixed apportionment but on objective criteria tied to the level of water in Lake Mead.[131] The accomplishments in the basin since that time speak for themselves as a reflection of cooperative decision making that now includes Mexico as well as environmental interests.[132]

While academics continue to suggest that the solution to basin problems is a Colorado River Commission, the states themselves have expressed absolutely no interest in such a commission. It is difficult to envision the states ceding the power they hold under present arrangements to some kind of independent commission, however attractive it may seem from an outside perspective. Without some dire emergency that would require radical change in existing basin decision making processes, it is unlikely we will see much more than continued efforts to engage stakeholders more broadly, including tribes, in matters of concern to them.

Summary

The Colorado River Commissioners were pioneers. Not only were they the first to attempt a compact negotiation for the purpose of apportioning the water uses of an interstate river, they were working at a time with limited and often faulty information, with limited access to additional information, with limited communication options, and with few domestic models for how to carry out and successfully complete such a complex and challenging

130. This story is well told in James S. Lochhead, An Upper Basin Perspective on California's Claims to Water from the Colorado River Part I: The Law of the River, 41 U. Denv. L. Rev. 290 (2000-2001).

131. Department of the Interior, Record of Decision: Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead, December 2007.

132. This two-decade story is relayed in Lawrence J. MacDonnell, 2000-2019 in the Colorado River Basin and Beyond (June 29, 2020). Available at SSRN: https://ssrn.com/abstract=3638634 or http://dx.doi.org/10.2139/ssrn.3638634.

negotiation. Given the challenges and the limitations, theirs was a signal success. We are their fortunate beneficiaries.

That the basin's water supply has been substantially overdeveloped and overused is undeniable. The fault, if there is fault to be assigned, rests more directly on the ambitions of basin interests, including the Bureau of Reclamation, to take advantage of their ability to get Congressional support and funding for such development, aided by the cash register dams producing low-cost hydroelectricity providing economic benefits sufficiently great to disguise the real cost of this water development and use. We are in the world of Reisner's *Cadillac Desert*.[133]

The Colorado River Compact has many flaws. But they affect basin interests in different ways. It is difficult to imagine gaining support for substantial changes from the widely disparate interests that now compete for uses of the Colorado River. Rather it seems more likely the parties will continue to negotiate agreements that they deem necessary to work around compact flaws and achieve broad basin objectives.

133. Marc Reisner, *Cadillac Desert: The American West and its Disappearing Water* (1986).

Richard Morrison[*]

DOING JUSTICE WITH WATER: FINDING EQUITY THROUGH NEGOTIATIONS

Introduction

Equity is a multi-faceted subject. Discussions about equity often invoke general philosophical principles but sometimes focus on access to resources, getting a seat at the negotiating table, or ensuring historical injustices are not continued today. Therefore, writing about water and equity requires a definition or referent for equity, especially when writing for a law journal. Outside the accounting domain and related financial constructs, "equity" is generally understood as fairness.[1] Lawyers may understand equity as focused primarily upon the entitlements held by competing interests—entitlements that are challenged and revised by legislation, litigation, and negotiated settlements. For this article, entitlement means a water right recognized by the law. This article mentions broad concepts of equity but focuses primarily on whether the settlement of indigenous water rights claims in central Arizona achieved equity among competing entitlements.

It should be noted from the outset that a fixation on entitlements to water necessarily limits the concept of equity. If, for example, there is no recognized "entitlement" on the part of the environment or at least on the part of all living beings, some would argue the result is bound to be unfair to someone or something. It could be that no one represents the interests of those without entitlements.

This author's participation as one of many negotiators in four Arizona-based settlements of native American water rights claims provided ample opportunity to test the concept of equity applied to those settlements.

This article describes in detail a portion of the author's experience negotiating the Salt River Pima-Maricopa Indian Community ("SRPMIC") Water Rights settlement. Perceptions formed in that experience predominate

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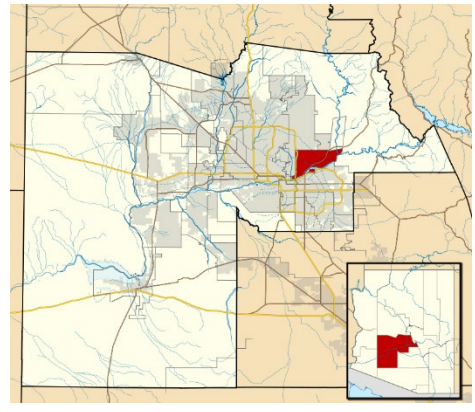
1. See, e.g., Thomas M. Franck & Dennis M. Sughrue, *The International Role of Equity-as-Fairness*, 81 GEO. L.J. 562 (1992).

herein. There is a good reason for that fact. The author also negotiated the claims of the Ft. McDowell Indian Community, San Carlos Apache Tribe, and Gila River Indian Community (all of which followed the SRPMIC settlement). The same or at least similar motivations, dynamics, and settlement criteria were apparent in all of the settlement talks. In other words, while the details of the settlements differed significantly, the parties' motivations and objectives seemed very similar from one set of negotiations to another. Because time and space limitations prevent a detailed description of the negotiations of each settlement, this article draws on contemporaneous notes and writing completed at the time of the SRPMIC settlement. The reader is asked to accept that the SRPMIC settlement set the stage for how subsequent settlement talks would be conducted.



This map shows the incorporated areas and Indian reservation boundaries in Maricopa County, Arizona, along with water bodies and major highways and roads. The Salt River Pima Maricopa Indian Community is highlighted in red.

The SRPMIC Settlement

The situation needing resolution in the SRPMIC settlement consisted of claims represented by five highly complex lawsuits over the water rights of certain Indian tribes in the Phoenix area. The unresolved litigation created uncertainty about the reliability of other recognized rights (apparently valid rights) to use an already scarce water supply.[2]

A variety of interests had initiated the litigation. The Salt River Pima-Maricopa Indian Community, occupying reservation land northeast of Phoenix and adjacent to Scottsdale, Arizona, had filed some of the suits as plaintiffs. The United States had brought other lawsuits in its trustee's capacity for the Salt River Pima-Maricopa Indian Community.[3] Other relevant litigation had been initiated by neither SRPMIC nor the United States; it was

2. Interview with Michael O. Leonard, General Manager, Roosevelt Water Conservation District, Higley, Arizona, 16 September 1990 (hereinafter "Leonard Interview").

3. Salt River Pima-Maricopa Indian Community v. Aguilar (D. Ariz. Filed Dec. 23, 1982); Salt River Pima-Maricopa Indian Community v. United States (D. D.C. filed Jan. 18, 1982).

a general adjudication of the rights of all water claimants using water from the Gila River and its tributaries.[4] Because the water rights claimed by SRPMIC pertained to perhaps the most important tributaries on the Gila River system, persons interested in the SRPMIC claims also prepared themselves to deal with tribal claims in the Gila River adjudication. The adjudication was expected to require between ten to twenty years of additional work to complete (however, as of this writing, the adjudication is not yet concluded).[5] In the meantime, water planners recognized their future water supplies were uncertain: because of outstanding Indian claims, the quantity of water which could be relied upon to support future city growth could not be accurately calculated. The Indians said they had been shortchanged in the delivery of water to which they were entitled under existing state and federal law—a situation they were no longer willing to endure.[6]

The United States was in the awkward position of supporting some Indian claims while resisting other elements in the lawsuits because the United States was named as a defendant in one of the suits. (The pleadings described the United States as having breached its fiduciary responsibility to the applicable Indian community by tolerating racial discrimination in the early development of the area's water reclamation district and failing to ensure delivery of water associated with acknowledged entitlements. The United States contested these allegations formally.)[7] However, because of the federal government's fiduciary responsibilities to Indian tribes, attorneys for the United States also supported the tribal claims to water. Attorneys for the cities and irrigation districts in the Phoenix area found the congressional staff and federal agency personnel increasingly interested in settlement possibilities as they reviewed the situation together.[8]

The issues which were discussed in negotiations started with the question, "What do you want?" next considered the question, "What will that cost?" and ended with the question, "What is the probable result of litigation on the pending issues?" Litigation exposure seemed the ultimate boundary

4. In re The General Adjudication of All Rights to Use Water in the Gila River System and Source, W-1 – W-4 (Maricopa Co. Super. Ct., consolidated numerous pending matters under order of Ariz. S. Ct. dated November 24, 1981).

5. Leonard Interview, supra note 2.

6. Ibid. See also U.S. Congress, Joint Senate, Select Committee on Indian Affairs and House Committee on Interior and Insular Affairs, Testimony of Gerald Anton, President, Salt River Pima-Maricopa Indian Community Council. 100th Cong., 2d sess., 1988, p. 102.

7. Salt River Pima-Maricopa Indian Community v. United States, supra note 3.

8. Leonard Interview, supra note 2.

for settlement possibilities.[9] Moreover, litigation exposure was a criterion expressly used in evaluating the settlement, mentioned by James W. Ziglar, Assistant Secretary of Interior for Water and Science, in his initial public criticism of the settlement.[10]

It should be noted that the availability of Colorado River water made the SRPMIC settlement possible. All the non-Indian parties had to contribute some water to the settlement. Some parties assigned their subcontracts for Colorado River water to other parties in the settlement.

Federal legislation ultimately authorized the settlement in 1988, approximately six years after the United States filed its first complaint against the state parties.

Benefits of the Settlement

When concluded, the settlement and Act greatly benefited the parties involved. SRPMIC's reservation, consisting of over 50,000 acres, was determined to have 27,200 practicably irrigable acres.[11] A total water supply of 122,400 acre-feet per year was virtually guaranteed to SRPMIC by the workings of the agreement.[12] The cities, serving approximately 80% of the 2,100,000 residents in the Phoenix area, developed alternative water sources through the settlement to keep those residents supplied. The pending litigation was settled, and further costs of litigation were avoided.

Notions of Equity

In water rights settlements, almost all participants have recognized or arguable entitlements. The most important Indian entitlement claims are those based on "W*inters* rights," from the United States Supreme Court case W*inters v*. U*nited* S*tates*, decided in 1908.[13] On Arizona Indian reservations, W*inters* rights entitlements are usually based primarily on the number of practicably irrigable acres on a reservation ("the PIA standard"). State parties usually have contract rights, appropriative rights, and, occasionally, relevant groundwater claims. All of these may be recognized by state law and

9. Interview with Michael J. Brophy, Attorney, Ryley, Carlock & Applewhite, Phoenix, Arizona, 10 April 1989 (hereinafter the "Brophy Interview").

10. Letter from James W. Ziglar, Assistant Secretary of the Interior, Washington, D.C., May 10, 1988 (hereinafter the "Ziglar Letter").

11. Salt River Pima-Maricopa Indian Community Water Rights Settlement Agreement, dated February 12, 1988 (hereinafter the "SRPMIC Agreement"), Section 1.1.

12. Ibid., Section 6.2

13. 207 U.S. 564 (1908).

sometimes reinforced by prior judicial decree. However, what might be the criteria for evaluating the entitlements' merit, morality, or fairness?

Some readers will argue that if equity means fairness, one can reach a fair result without achieving economic justice. However, one referent for the concept of equity is economic justice. (The ideas behind economic justice have the advantage of prompting thought that includes values beyond those strictly legal in concept.) Various principles of economic justice exist. Here is one illustrative set of principles that go well beyond legal rights:

1. Justice requires equal respect and concern for all. Respect and concern for all imply a movement beyond entitlement theory to a system of economic justice that may embrace notions of love, community, and friendship as normative. Arguments abound about whether this principle requires economic equality. Still, there are arguments for particular inequalities if they result from pursuing freedom and working to benefit the disadvantaged.[14] One source argues that a just economic arrangement honors and respects the equal worth of all human family members. (Here again, a narrow focus on human wants and needs denies the concept of equity, fairness, and justice to the rest of creation.) However, at a minimum, justice shows respect and concern with a presumption toward a distribution of economic goods and services that will enhance the dignity of each community member. Borrowing from the work of John Rawls, this source concluded that economic inequalities could be justified if they are to the most significant benefit of the least advantaged and if they go with positions or appointments open to all under conditions of fair equality of opportunity.[15] This author did not observe any discussion of this principle during negotiations of the SRPMIC claims. At a minimum, drawing the bounds of community would have been challenging.
2. Justice requires special concern for the poor and oppressed. This principle derives chiefly from religious sources. The argument runs that equal respect and concern for all requires that the poor can share tangibly in the material benefits of creation. Religious leaders tend to judge any economy by how it aids its most vulnerable members.[16] While this principle was never expressly discussed during water rights settlement negotiations, participants would likely have agreed that tribal members were generally poor and suffered a history of

14. "Christian Faith and Economic Justice," New York: Office of the General Assembly, Presbyterian Church (USA), 1984 (hereinafter "Christian Faith"), p. 11.

15. Ibid. at p. 31.

16. Ibid. at p. 11.

oppression at that time. (Of course, water rights settlements were not the only way to improve the economic prospects of the tribes, as subsequent gaming compacts have demonstrated.)

3. Justice requires responding to basic human needs. This principle is understood to include an entitlement that persons receive essential goods and services without regard to what persons produce within the economic system. Sufficiency of food, shelter, medical care, clothing, and work opportunity are critical economic justice norms. Sufficiency is recognized as an uncertain standard, but justice may require that some overfed persons get less.[17] A just economic system will also allow people to participate in decisions that significantly affect their lives. For persons who cannot provide for their own needs, there is, as a matter of entitlement, an obligation for society to make provisions. This obligation honors human dignity. The successful completion of water rights settlements set the stage for tribes to meet the basic human needs of their members. Still, most settlement participants would not have any direct role in delivering needed goods and services to tribal members.
4. Justice requires human freedom. There are both secular and religious arguments for human liberty. Theologically, because persons are understood to be made in God's image, each person is considered free and responsible. There are problems in understanding what this principle of freedom requires of an economy in concrete terms. Still, the argument is made that we are to evaluate an economy by the opportunities it affords to enjoy personal liberty.[18] In some situations, the state should act to foster liberty; in other situations, respect for human freedom requires non-interference by the state. In the case of the SRPMIC settlement, the catalyst was litigation filed by the United States and the tribe against almost all central Arizona water users alleged to be interfering with the tribe's W*inters* rights. Even after the first suit was filed, at least three years passed while the non-Indian parties decided whether to litigate or negotiate. Many state parties were initially very reluctant to negotiate. Ultimately, however, all were persuaded that negotiation might be faster, better, and cheaper than litigation. As it turned out, there is a persuasive argument that protracted negotiations were not faster or cheaper than litigation. Still, the result was better because agreements were reached that were beyond the remedies available to any court. Typically, litigation produces results that do not consider opportunities for marketing water (permanently or temporarily) or for augmenting existing water supplies with resources available to

17. Ibid.
18. Ibid. at 31.

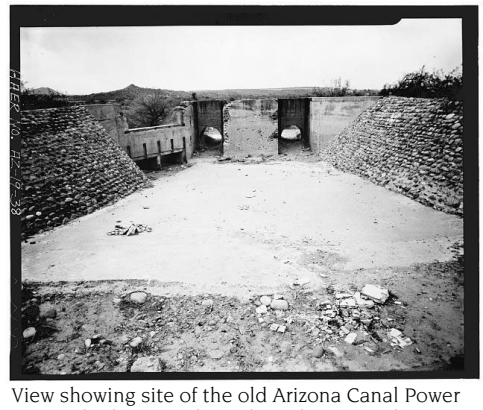
others who might participate in a comprehensive settlement. More broadly, settlement negotiations did represent the exercise of human freedom by all participants. Many decisions had to be made in the face of multiple options.

5. Justice requires contributions to the well-being of the community. Several justice-related publications evidence a feeling of responsibility for the well-being of people in relationships. The context can be a geographical grouping or other categorical organization of persons. Within relationships and in honor of the personal dignity of each person, justice principles generally argue that we think of ourselves as one family without regard to geographical limits. In water rights negotiations, of course, it was relatively easy for tribal representatives to speak on behalf of a community. It was unlikely that defendants in the federal suit would see themselves as part of the same community. Nevertheless, justice principles argue that we must manifest an essential solidarity that binds us into one family. We are to strive to overcome divisiveness, bitterness, and alienation to live in peace and harmony.[19]
6. Justice requires the fulfillment of our obligations to future generations. Justice theory evidences an honest critique of economic theory and practice. Self-regarding behavior is destructive if it disregards the need for a community to endure indefinitely through time. Until recently, few Americans would have seriously challenged the notion that the goal of an economy should be growth, but justice theory sometimes suggests the goal should be modified. The optimum economic production should be sufficient to meet all persons' needs and be sustainable for the future. Justice theory argues that analysts must evaluate economic systems by committing to conserving and developing resources for future generations.[20]

These six principles were initially presented herein as a basis for evaluating the results of a settlement process, but it is intriguing to consider how an intention to apply the principles might have affected the negotiations themselves. Might negotiators' attitudes have been adjusted to assess the impact of justice-related objectives? In retrospect, the SRPMIC settlement reflects an application of some of the principles of economic justice just cited, but arguably without conscious intent. The SRPMIC settlement process did not consider any vision that remotely resembled economic equality. So the participants did not challenge themselves to consider what their imagination might have achieved in this regard. It is commonplace for justice thinkers to debate whether productivity or distribution is the more critical test of

19. Ibid. at 12.
20. Ibid.

economic justice theory, but to these two concerns, one might add a third—freedom of choice. Interestingly, SRPMIC's decisions about water use virtually guaranteed an inequality in economic benefit (compared to surrounding communities) because agricultural uses of water (then preferred by the tribe) are generally less profitable than alternative uses. This point underscores the importance of the choices made by disadvantaged people. As mentioned above, legitimate arguments exist for particular economic inequalities if they result from exercising freedom. However, it should be evident that the choices made by the present generation will affect future generations, who, given a choice, might prefer to reverse the choices made by those presently involved. Many negotiators were anxious to establish or promote a higher priority for urban water uses instead of rural economic benefits. Still, through the entire period of negotiations, there was never observed any serious challenge to the preference of SRPMIC for an agricultural economic base. Questions of resource economics and conservation gave way to an implicit recognition that SRPMIC should or could achieve self-determination by resolving its water claims.[21]



View showing site of the old Arizona Canal Power House, looking south on the Salt River Indian Reservation (now spillway A). Courtesy of the Library of Congress. Photographer: James Eastwood, June 1990.

Negotiations in the SRPMIC settlement started with each party being invited to generate its own "wish list" of benefits it hoped to achieve. Such an approach induces self-regarding analysis. That analytical approach is practical, even necessary, particularly where negotiators assume representative relationships with their principals. It would be unrealistic to assume that any negotiator would long remain employed by an Indian tribe, city, irrigation district, or government agency if the impacts of proposed settlement strategies were not clearly understood and communicated to the principals. Moreover, it is important to note that negotiators are selected for their roles precisely because they know how a contract revision or change in the operation of the river system will affect the rights and obligations of other water users from the same river system. Seldom would a negotiator be chosen solely because he or she possessed the ability to see beyond the private interests of his or her principal. In the case of the SRPMIC settlement, certain federal government representatives (e.g., Congressional staff, Bureau of Indian Affairs representatives, or Interior Department officials) took a broader

21. Leonard Interview, supra note 2.

view. Still, such persons had virtually no role in the settlement until the complicated negotiation was concluded. In other words, the opportunity to discuss contributions to the settlement (which contributions might be viewed as sacrifices or losses economically) and the arguments over limitations of benefits to be gained by the parties was not initially extended to government representatives. These discussions were carried out between lawyers, engineers, and economists hired by the local parties to analyze the costs and benefits to these parties.

Moreover, even after the representatives of the federal government became involved, their ability to pursue justice aims was limited. U.S. negotiators had a somewhat defensive role in the discussions for two reasons. First, the United States was a defendant in some pending litigation. Second, the local parties (meaning Phoenix area cities and irrigation districts) initially proposed that the federal government bear all or at least most of the dollar cost of implementing the settlement. While the final settlement did require dollar contributions from the State of Arizona, local cities, and even the Salt River Pima-Maricopa Indian Community itself, the original position of the parties was that the local interests would contribute the water required to make the settlement work. The federal government would contribute all the dollars needed to build or refurbish water distribution systems and pay other expenses that could not be satisfied through in-kind exchange of water or other compensatory arrangements. Therefore, even those government representatives who took a broad view of the common good that could result from settlement often considered the government's cost and the importance of shifting some of the financial responsibility to other parties through negotiation. The role of negotiators as representatives of persons with vested interests may limit the potential for a negotiator to employ a broader vision of justice. On the other hand, there is significant potential for a respected negotiator, once engaged, to influence a client's thinking. Ultimately, the successful application of justice principles depends upon the willingness of those who are represented to embrace broader concepts of the public good.

It should be noted that geographic proximity to the SRPMIC reservation seemed to have some effect on defendants in the pending litigation. Those defendants who were proximate to the reservation location demonstrated a greater sense of community than those whose location was more remote geographically. Thus, for example, the cities of Mesa, Chandler, and Scottsdale took a more active interest· in the negotiations than the City of Glendale. Similarly, the Roosevelt Water Conservation District demonstrated a greater interest in the settlement than the Roosevelt Irrigation District, which was much farther away from the SRPMIC boundaries.[22] It was frankly easier for the near-neighbors to envision future cooperative relationships with SRPMIC, whether such visioning might involve groundwater recharge

22. Ibid.

projects or a more comprehensive form of economic development. Indeed, during the SRPMIC talks, the initial efforts toward a new regional airport for Phoenix were made in a cooperative working relationship with the Gila River Indian Community. Some of the SRPMIC negotiators were also involved in planning this airport initiative. While the airport issue was technically unrelated to the SRPMIC settlement, the point is that planners generally find opportunities to work on a cooperative basis across a broad spectrum of issues when they know the leaders of other community groups in close geographic proximity. Working with persons from SRPMIC developed understandings, if not actual friendships, providing future opportunities for cooperation by tribes and non-Indian parties.

Summation

2023 is the thirty-fifth anniversary of the SRPMIC settlement act. Did the parties achieve equity? By one measure, yes. After all, all the signatories agreed upon the result. Behind the settlement details, each party concluded that the cost/benefit analysis justified participation in the final deal. By other measures, the result was probably "rough justice" because the results somewhat paled in relation to what might have been achieved and what costs might have been avoided.

The entitlement concept was sorely tested during the process because of reliance on the PIA standard. This observation is perhaps best illustrated by the subsequent Gila River Indian Community ("GRIC") Water Rights Settlement Agreement. GRIC claims (original and amended claims) in the general stream adjudication approached 2 million acre-feet. However, authoritative sources explained that there had never been 2 million acre-feet of river flow in the Gila River in recorded history. In this sense, the PIA standard (supporting a legally recognized entitlement) produced a claim unrelated to the available resource. A legal doctrine claiming resources in excess of supply seems a legal fiction, and the GRIC claim embraced that fiction. Relying on an entitlement that cannot be satisfied is relevant to this article, to be sure, but the full exploration of this problem is outside the scope of this article.

Applying the cited principles of economic justice to the facts of the SRPMIC settlement discussions has demonstrated at least two distinct conclusions. One is that negotiators achieved substantive results consistent with some of the principles, particularly where the needs of all in the community were considered. The other conclusion is that each party's preoccupation with its own benefits was mostly inconsistent with the process suggested by the principles. The negotiators in the SRPMIC case study showed no interest in voluntarily contributing or sharing resources for the common good without compensating benefits. The concept of community was therefore limited in application by the boundaries of political jurisdiction. A strict application of the principles would have presented the

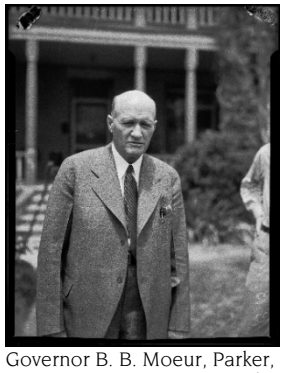
possibility of an equitable settlement sufficient to meet the needs of all participants without the cost and delay associated with the legal process. Achieving that result would have depended upon respect and concern for the economic conditions of each party. At the very least, explicit reference to the principles would have provided an intellectual resource, a new way of thinking about the equities associated with the proposals made, and a way of imagining possibilities not now recognized by legal entitlement theory.

Professor Joe Regalia[*]

FIGHTING FOR WATER EQUITY IN THE WEST: WHOSE WATER IS IT ANYWAY?

I. Introduction

In 1934, the Bureau of Reclamation began building the Parker Dam on the Colorado River in Arizona. The dam was meant to direct Colorado River water to arid regions that clamored for it, including neighboring California.[1]



Governor B. B. Moeur, Parker, Arizona, 1934. Image from the UCLA Charles E. Young Research Library Department of Special Collections, CC by 4.0.

But Arizona wasn't having it. Arizona's governor at the time, Benjamin Moeur, was outraged. He and others in the state protested the dam's development, believing that it couldn't be constructed on Arizona land without Arizona's consent.[2]

And so the *Arizona Navy* was born—not only the last state-backed navy in the U.S., but "the last occurrence in American history when one state took up arms against another no matter how unlikely it was that the arms would ever be fired."[3]

The story that followed is sensational, if short-lived. Moeur was not waiting for backroom

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1. Discover our Shared Heritage Travel Itinerary Series, California, Parker Dam, National Park Service (last updated Jan. 13, 2017), nps.gov/articles/california-parker-dam.htm; Bob Silbernagel, *Water War in 1934 Halted Dam on the Colorado River*, THE ASSOCIATED PRESS, Mar. 11, 2019, https://apnews.com/article/b1f1a8422cb64a7f9858e3c8a76c4a50.

2. United States v. State of Ariz., 295 U.S. 174, 179, 55 S. Ct. 666, 666, 79 L. Ed. 1371 (1935).

3. Nadine Arroyo Rodriguez, *Did You Know: Arizona Navy Deployed In 1934*, KJZZ, (Sept. 5, 2014, 2:52 PM), https://kjzz.org/content/11126/did-you-know-arizona-navy-deployed-1934.

negotiations to resolve this water dispute.[4] He dispatched Arizona's National Guard to halt the dam's construction. The incursion started as a six-man squadron, but when the soldiers confirmed that construction had begun without Arizona's consent, the state's response grew. On Nov. 10, 1934, Moeur declared martial law and dispatched 100 National Guard troops from the 158th Infantry Regiment. Moeur fired off a telegram to President Franklin Roosevelt:

> I [] found it necessary to issue a proclamation establishing martial law on the Arizona side of the river at that point and directing the National Guard to use such means as may be necessary to prevent an invasion of the sovereignty and territory of the State of Arizona.[5]

Arizona's Guard requisitioned ferryboats from the town of Parker so that it could patrol the waters—land-locked Arizona didn't keep a naval fleet on standby. For days, the naval force patrolled the waters.[6]

The Arizona Navy was modest. The fleet consisted of the *Nellie* T. and *Julia* B., steamboats belonging to Nellie T. Bush and her family. Later, Bush would be named the "Admiral of Arizona's Navy" by Moeur.[7]

The Arizona Fleet put up no fight.[8] Indeed, the boats soon got tangled in cables from the dam's construction. Luckily, the Arizona Navy was a short commission, and the dispute was settled shortly after in court—in Arizona's favor.[9] Although, construction resumed in early 1935 after Congress approved the project.

The fights over the Colorado River's waters have continued ever since, albeit without as much showboating. As water resources have dried up, states regularly dispute who should get water—especially from shared sources like the Colorado.[10]

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4. Bob Silbernagel, "Water War in 1934 Halted Dam on the Colorado River," THE ASSOCIATED PRESS (Mar. 11, 2019), https://apnews.com/article/b1f1a8422cb64a7f9858e3c8a76c4a50

5. *Id.*

6. Nadine Arroyo Rodriguez, "*Did You Know*: *Arizona Navy Deployed In* 1934, KJZZ, (Sept. 5, 2014, 2:52 PM), https://kjzz.org/content/11126/did-you-know-arizona-navy-deployed-1934.

7. *Id.*

8. REISNER, CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER 258 (1993).

9. *Id.*

10. Annie Snider, *Shrinking Colorado River hands Biden his first climate brawl*, POLITICO (Feb. 4, 2023, 7:00 AM),

Arizona state senator Nellie T. Bush, husband Joe Bush, and another man, near Parker, Arizona, 1934. Image from the UCLA Charles E. Young Research Library Department of Special Collections, CC by 4.0.

Something the Arizona-Navy dispute and many other historical water fights have in common are the interests the advocates say they are defending. Back in 1934, Governor Moeur said Arizona was fighting to protect "an invasion of the sovereignty and territory of the State of Arizona."[11] This sounds like the battle cry called by Mississippi in a water dispute the U.S. Supreme Court heard in a recent term—in which Mississippi claimed neighboring Tennessee was invading its sovereignty by draining water from a shared resource.[12]

When states fight over resources other than water, that may be true. States can own things, and if one state were to steal resources owned by another, the victim can press its rights as a sovereign—because the state lost something that it owned *as a state*.

But water is different. What Governor Moeur should have said was that he was protecting "an invasion of his citizens' rights to water, left in trust with him." Because unlike most other resources, the rights to water remain in a trust—and always have. Our federal and state constitutions embody important limitations on what governments can do, both express and

https://www.politico.com/news/2023/02/04/colorado-river-biden-climate-change-water-00080990.

11. Bob Silbernagel, *Water War in* 1934 *Halted Dam on the Colorado River*, THE ASSOCIATED PRESS, Mar. 11, 2019, https://apnews.com/article/b1f1a8422cb64a7f9858e3c8a76c4a50.

12. *See* Noah D. Hall & Joseph Regalia, *Interstate Groundwater Law Revisited: Mississippi v. Tennessee*, 34 VA. ENVTL. L.J. 152, 166 (2016).

implied.[13] And one of these rights is in water, commonly expressed as the public trust doctrine.[14]

And this *trust* nature matters. Because the true owner—the beneficiary—has powerful rights to what's in a trust.[15] The trustee (here, the state) is limited in how it uses what's in the trust—always governed by the need to serve the beneficiary.[16]

Now, disputes over the Colorado River are once again making front-page news in the West (although, hopefully no navies will be involved). Seven Western states, which include some of the fastest-growing in the nation,[17] get some of their water from the Colorado River today. How that water gets used is governed by a complex network of laws that has been evolving for 100 years, known as the Law of the River—an international treaty, two interstate compacts, U.S. Supreme Court decisions, state court rulings, and federal statutes and regulations.[18] Recently, the states in this group missed two federal deadlines to come up with an agreement about how to handle the river's declining capacity in the critical Colorado River Compact.[19]

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13. See Illinois Cent. R. Co. v. State of Illinois, 146 U.S. 387, 452–54 (1892) (a foundational Supreme Court case establishing the public trust doctrine and how that doctrine may prevent a legislature from relinquenshing its water rights); *see also* U.S. CONST. art. I, § 9; U.S. CONST. amend. I-X, XIV; NV CONST. art. I, IV; *see generally*, W. F. Dodd, *Implied Powers and Implied Limitations in Constitutional Law*, 29 YALE L. J. 137 (1919) (detailing the inherent powers and limitations contained within the constitution and how those restrict legislatures from passing certain laws); Jessica Bulman-Pozen & Miriam Seifter, *The Democracy Principle in State Constitutions*, 119 MICH. L. REV. 859 (2021) (detailing, among other things, the structure and limitations of state constitutions and how that affects democracy).

14. *See* Illinois Cent. R. Co. v. State of Illinois, 146 U.S. 387, 452–54 (1892) (a foundational Supreme Court case establishing the public trust doctrine and how that doctrine may prevent a legislature from relinquishing its water rights).

15. *Id. see also* Kacy Manahan, *The Constitutional Public Trust Doctrine*, 49 ENVT'L, L. 263, 264–65 267–70 (2019);

16. See e.g., Pennsylvania Env't Def. Found. v. Commonwealth, 161 A.3d 911, 931–32 (Pa. 2017)

17. Census, Percent Change in State Population: July 1, 2021 to July 1, 2022 (Dec. 22, 2022), census.gov/library/visualizations/2022/comm/percent-change-state-population.html

18. *See* NORRIS HUNDLEY, JR., WATER AND THE WEST: THE COLORADO RIVER COMPACT AND THE POLITICS OF WATER IN THE AMERICAN WEST (2d ed. 2009).

19. Alvin Powell, *Lesson Emerge as 7 Thirsty States War over Colorado River Water*, THE HARVARD GAZETTE: NATIONAL & WORLD AFFAIRS (Feb 14, 2023),

The story of how states have handled the Colorado River since the Arizona-Navy incident isn't all a bad one.

> By and large[] what we've seen in the Colorado River Basin over the past twenty years is a good deal of collaboration—a collaborative culture among policymakers—and, as offshoots, a series of incremental measures aimed at adapting the Colorado River Compact and broader Law of the River to the reality of climate change.[20]

That sounds great, but even this comment highlights the focus on the *states*—the "policymakers"—rather than the people within those states.[21] What happens when that collaboration falls apart? And what happens when some of those states press interests or rights on their own behalf, rather than on behalf of the citizens?

II. The Public Trust Doctrine Over Water

The public trust doctrine extends through early America, English common law, 13th century Spain, 11th century France, and back to early Roman law.[22] The thrust is that water is so fundamental to "all mankind"[23] that everyone should freely enjoy it, like air.[24] We would consider it laughable for a state to sell off our rights to air, and the same goes for water. Water, in other words, is a property of the "commons" that no sovereign can take for their own.[25]

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https://news.harvard.edu/gazette/story/2023/02/colorado-river-crisis-explained/.

20. Jason Anthony Robison, *Confluence: The Colorado River Compact's Centennial*, 22 Wyo. L. Rev. 11, 18 (2022).

21. *Id.*

22. *See, e.g.*, Gail Osherenko, *New Discourses on Ocean Governance: Understanding Property Rights and the Public Trust*, 21 J. ENV.. L. & LITIG. 317, 350 (2006); J. Inst. Protemium, 2.1.1 (T. Sandars trans. 4th ed. 1867); KING JOHN OF ENGLAND, MAGNA CARTA clause 33 (Eng. 1215); SIR MATTHEW HALE, A TREATISE DE JURE MARIS ET BRACHIORUM EJUSDEM (1670); FRANCIS HARGRAVE, A COLLECTION OF TRACTS RELATIVE TO THE LAW OF ENGLAND 1 (T. Wright, 1st ed.1787).

23. J. Inst. Protemium, 2.1.1 (T. Sandars trans. 4th ed. 1867).

24. *See* Juliana v. United States, 217 F. Supp. 3d 1224, 1252 (D. Or. 2016) *motion to certify appeal denied*, No. 6:15-CV-01517-TC, 2017 WL 2483705 (D. Or. June 8, 2017) (discussing the trust theory of the doctrine).

25. *See* Hale, *supra* note 17; *see also In re* Water Use Permit Applications, 9 P.3d 409 (Haw. 2000) (applying public trust obligations to state agency).

That's where the trust part comes in. At its core, the trust stems from the public having a fundamental interest and accompanying right to water resources that preexists the U.S. Constitution *or any state's constitution*.[26] Even the U.S. Supreme Court has supported the force of this fundamental limitation on governments' relationship with water, explaining that "[t]he control of the state for the purposes of the trust can never be lost," except when "promoting the interests of the public," or when privatizing the water will not inflict "any substantial impairment of the public interest in the lands and waters remaining."[27]

Like any fundamental right held by the People, it's not infringed any time a state impinges on it. Small transgressions aren't always actionable under this trust theory. Instead, it's when governments take steps that threaten important continuing interests in water that affect the *public's* trust interests in a substantial way.[28]

And like any beneficiary, the public can't sue the trustee when that trustee is doing a good job maintaining the trust. And perhaps that's how we should view much of the Compact's 100-year history: good-faith efforts by the trustees. It's only when a trustee, here a state, has violated its duties substantially that we can enforce our fundamental rights.[29] These public

26. *See* Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich. L. Rev. 471, 475–78 (1970). ; A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 8:4 (2005).

27. *See Ill. Cent.* R.R. *Co.*, 146 U.S. at 453 (applying limitations on state power).

28. Multiple states have created tests to determine meaningful violations of the public trust doctrine. *See e.g.*, Kootenai Env't All., Inc. v. Panhandle Yacht Club, Inc. 671 P.2d 1085, 1092 (Idaho 1983) (adopting a five-part test, from the Supreme Court of Wisconsin, to determine whether the public trust doctrine has been violated in a specific case.). For further case illustrations *compare* Arizona Ctr. For L. in Pub. Int. v. Hassell, 837 P.2d 158, 167 (Ct. App. 1991) (the court using the test established in Kootenai held that an Arizona Law that relinquished the state's equal footing interest in all watercourses other than the Colorado violated the Public Trust Doctrine); *with* Kelly v. 1250 Oceanside Partners, 140 P.3d 985, 989–91, 1006–08, 1014 (Haw. 2006) (holding that the County of Hawai'i did not violate its public trust duty when it failed to supervise the construction of a resort that caused runoff pollution in the Kealakekua Bay); *and* Kramer v. City of Lake Oswego, 446 P.3d 1, 19-20 (Or. 2019) (holding that a city's prohibition of non-city residents from swimming in a lake did not violate the public trust doctrine in the Oregon Constitution).

29. Geer v. Connecticut, 161 U.S. 519, 534 (1896), *overruled by* Hughes v. Oklahoma, 441 U.S. 322 (1979) ("[I]t is the duty of the legislature to enact such laws as will best preserve the subject of the trust, and secure its beneficial use

Ferry N*ellie*, protecting Colorado River from construction of Parker Dam, near Parker, Arizona, 1934. Image from the UCLA Charles E. Young Research Library Department of Special Collections, CC by 4.0.

fundamental rights to water are baked into any ownership theory states or private parties have. This is much like the principle that rights that come with owning land are qualified by the competing rights of others, like the right to be free from nuisances.[30]

Some have suggested that rights like those protected by the public trust doctrine are reserved to the states, not the people. These folks have suggested that the public trust doctrine was intended to protect narrow interests that don't extend to a general interest in continued access to water now and in the future—and even if other interests used to be protected, states can curb those protections at will.[31]

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in the future to the people of the state."); I*n re* W*ater* U*se* P*ermit* A*pplications*, 9 P.3d at 453 ("Under the public trust, the state has both the authority and duty to preserve the rights of present and future generations in the waters of the state.").

30. S*ee* Robin Kundis Craig, P*ublic* T*rust and* P*ublic* N*ecessity* D*efenses to* T*akings* L*iability for* S*ea* L*evel* R*ise* R*esponses on the* G*ulf Coast*, 26 J. LAND USE & ENVTL. L. 395, 407 (2011).

31. S*ee, e.g.*, Maureen E. Brady, D*efining* "N*avigability*": B*alancing* S*tate-Court* F*lexibility and* P*rivate* R*ights in* W*aterways*, 36 CARDOZO L. REV. 1415 (2015); *see also* Northern Transp. Co. v. City of Chicago, 99 U.S. 635, 25 L. Ed. 336, 1878 WL 18229 (1878); Daniels v. Carney, 148 Ala. 81, 42 So. 452 (1906); Colberg, Inc. v. State ex rel. Dept. of Public Works, 67 Cal. 2d 408, 62 Cal. Rptr. 401, 432 P.2d 3 (1967); Town of Orange v. Resnick, 94 Conn. 573, 109 A. 864, 10 A.L.R. 1046 (1920); State ex rel. Wilcox v. T. O. L., Inc., 206 So. 2d 69 (Fla. 4th DCA 1968);

But in ratifying the U.S. Constitution, it was the People, not the states, who had the power to reserve rights. After all, to ratify the U.S. Constitution, it is not state legislatures that acted, but people—through ratifying conventions.[32] So if you believe that the People held a fundamental right to water, the states only inherited it if the People handed it over (and even then, it's questionable whether the People of any generation can hand over the rights that future citizens hold).

In any event, the historical context surrounding water interests, then and since, confirms that the People reserved water rights to states solely in a trust. History illustrates that the underpinnings of the public trust doctrine derive from the public's transfer of its interests and rights to flowing water, not some subset of a state's rights or a narrow list of interests (that the states get to define).[33] There has always been a set of retained rights held by the People, and that includes public trust rights to water.

Some courts have suggested the public trust comes from owning land underneath water—particularly in early America.[34] That storyline has consistently eroded over the last century.[35] The public trust doctrine does not rely on states owning certain land.[36] Even the U.S. Supreme Court disconnected the public trust from ownership as far back as the late 1800s.[37]

There are also other historical hints that the public trust protects a wide-ranging public interest in water. In the 1600s, a pivotal text in the evolution

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Ferry Pass Inspectors' & Shippers' Ass'n v. White's River Inspectors' & Shippers' Ass'n, 57 Fla. 399, 48 So. 643 (1909); Parsons v. E.I. Du Pont De Nemours Powder Co., 198 Mich. 409, 164 N.W. 413 (1917); Macrum v. Hawkins, 261 N.Y. 193, 184 N.E. 817 (1933); Gaither v. Albemarle Hospital, 235 N.C. 431, 70 S.E.2d 680 (1952); Anderson v. Columbia Contract Co., 94 Or. 171, 185 P. 231 (1919).

32. U.S. CONST. art. VII.

33. *See* J. INST. 2.1.1-4 (discussing the public's right to flowing water). *See, e.g.*, *Nat'l Audubon Soc'y*, 658 P.2d at 709; *Juliana*, 217 F. Supp. 3d at 1224. *See, e.g.*, SAMUEL C. WIEL, WATER RIGHTS IN THE WESTERN STATES 10-13 (3d ed. 1911).

34. *See, e.g.*, Martin v. Waddell's Lessee, 41 U.S. 367, 410 (1842) (stating that states "hold the absolute right to all their navigable waters and the soils under them").

35. Oregon *ex rel.* State Land Bd. v. Corvallis Sand & Gravel Co., 429 U.S. 363, 378-79 (1977) (recognizing that public trust is not necessarily connected to title).

36. *Id.*

37. *See Geer*, 161 U.S. at 519.

of water rights was published, the *Commonwealth of Oceana*.[38] This text explains that the public has a far-ranging, fundamental interest in water—and that this is the government's source of authority over this resource.[39] Early Spanish and French law agree.[40]

Public trust principles over water were even incorporated in Article III of the 1783 Peace Treaty between Britain and the United States at the end of the Revolution, when the parties "agreed that the People of the United States shall continue to enjoy unmolested the Right" to access water "on the Coasts, Bays & Creeks of all other of his Britannic Majesty's Dominions in America . . . ."[41]

Since the earliest mentions of the public trust doctrine, courts in the U.S. have emphasized the public's fundamental right to water.[42] *Illinois Central* is among the most influential public trust case, and in striking down a state's attempt to impair an important waterway, the Court framed the issue as one of "substantial impairment of the *interest of the public* in the waters."[43] Indeed, the majority uses some form of the phrase "public interest" 16 times.[44]

Some of the confusion around what rights are protected and when states can be held accountable is a matter of evolving threats to water resources. During America's history, when threats to important current and future water resources were not threatened, the public trust has served a narrow role. After all, the public trust in water isn't in any particular drop; it's an interest in the ability to access water resources now and in the future. In Eastern states, for example, there has been little need for the public trust on any grand scale, and the trust has focused mostly on needs like the public's ability to use water for navigation or fishing.[45] Although some Western states faced water shortages, we were not facing the continuous and calamitous water resource crisis that climate change has brought on in recent decades.

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38. JAMES HARRINGTON, THE COMMONWEALTH OF OCEANA 171 (J.G.A. Pocock, 1992).

39. *Id.*

40. *See* M. MEYER, WATER IN THE HISPANIC SOUTHWEST 117-19 (1984); M. BLOCH, FRENCH RURAL HISTORY 183 (1966).

41. Definitive Treaty of Peace Between the United States of America and His Britannic Majesty, Gr. Brit.-U.S., art. III, Sept. 30, 1783, 8 Stat. 80.

42. *See, e.g.*, *Ill. Cent.* R.R. *Co.*, 146 U.S. at 435 (referring to the right at issue the "interest of the public in waters").

43. *Id.* (emphasis added).

44. *Id.*

45. *See* Brown v. Maryland, 25 U.S. (12 Wheat.) 419, 446 (1827) (noting the importance of navigation to early America).

That isn't to say some commentators and courts (and states) have rejected the theory that the public has a fundamental right to water.[46] But the weight of authority and historical evidence supports the public's fundamental right to water.[47] "The Social Contract theory, which heavily influenced Thomas Jefferson and other Founding Fathers, provides that people possess certain inalienable rights and that governments were established by consent of the governed for the purpose of securing those rights."[48] Given that the historical record is clear that the state's interests in water came from the public trust originally, and that the weight of authority since has confirmed that source, we should continue to view the state's relationship with water as a limited one akin to protecting other fundamental rights.

Also critical to the trust theory—and another reason to see the states' relationship with water as about more than what a legislature decides to decree—is that a minority group's interests cannot give way to another's interests just because it constitutes a bigger share. A trustee is trustee for all beneficiaries.[49]

The court in *Robinson Twp. v. Commonwealth* sums all this up nicely:[50] "The concept that certain rights are inherent to mankind, and thus secured rather than bestowed by the Constitution . . . has a long pedigree . . . that goes back at least to the founding of the Republic."[51]

With this public trust interest in hand: That we are entering an era when the public's fundamental rights to water are being threatened is almost

46. See, e.g., Henry P. Monaghan, *Foreword: Constitutional Common Law*, 89 HARV. L. REV. 1, 27–29 (1975); Brady, *supra* note 25 (criticizing the contention that the public trust comes from any constitutional principles).

47. *See* Michael Bloom & Rachel D. Guthrie, *Internalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory Approaches to Fulfilling the Saxion Vision*, 45 U.C.D. L. Rev 741, 799 (2012).

48. Juliana v. United States, 217 F. Supp. 3d 1224, 1260–61 (D. Or. 2016).

49. *See* Noah Webster, A Citizen of America (Oct. 17, 1787), *available at https://teachingamericanhistory.org/document/a-citizen-of-america-an-examination-into-the-leading-principles-of-america/*; Letter from James Madison to George Washington (Oct. 18, 1787), *available at https://founders.archives.gov/documents/Madison/01-09-02-0208* (suggesting that granting monopolies would be a breach of trust and outside Congress' enumerated powers).

50. Robinson Twp. v. Commonwealth, 83 A.3d 901, 946-50 (Pa. 2013) (plurality opinion).

51. *Id.*

undeniable. Water supplies are dwindling.[52] As climate change[53] and growth puts more strain on resources in the West,[54] including especially key waterbodies like the Colorado, the public's interests are in play on a grander scale than ever before.

III. The Colorado River and the Law of the River

The Colorado River remains immensely important both within the Colorado River Basin and beyond. Its waters sustain life and development and everything in between.[55] The Colorado River is a defining feature of the Southwest, providing lifeblood for eleven national parks, sustaining diverse American Indian tribes and farming communities, and enabling the growth of major metropolitan areas.[56]

Central to the Law of the River is the Colorado River Compact.[57] The seven states in the Colorado River basin (and the members of the Compact) are Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.[58] In the early 1900s, these states struggled to work out how to equitably use the Colorado's resources. So Congress authorized negotiations for the Compact in 1922, citing the region's arid nature and the desire to avoid water disputes between the states. Six states ratified the Compact by 1925, and Arizona joined in 1944. The Compact has been enacted by each of the seven members into their respective state laws.

52. Thomas R. Karl et al., Global Climate Change Impacts in the United States 41 (2009) *available at*

https://www.nrc.gov/docs/ML1006/ML100601201.pdf.

53. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT: SUMMARY FOR POLICYMAKERS 7-10 (Nov. 2007).

54. Amir Agha Kouchak et al., Comment, *Water and Climate: Recognize Anthropogenic Drought*, 524 NATURE 409, 409 (2015).

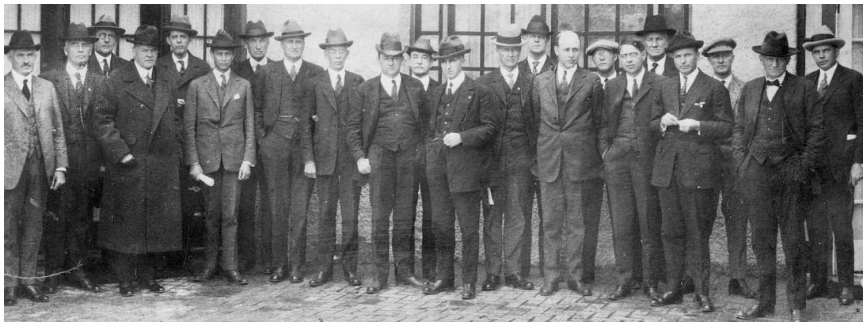
55. *See* Bureau of Reclamation, *Colorado River Basin Water Supply and Demand Study*, Interim Report No. 1, at SR-2, SR-10 (2011) (detailing how important the Colorado River Basin to the surrounding basin states).

56. *See* Southwick Assocs., *Economic Contributions of Outdoor Recreation on the Colorado River and Its Tributaries* 2 (2012).

57. Colorado River Compact, ch. 189, 1923 Colo. Sess. Laws 684 (1923).

58. COLO. RIVER COMPACT, art. II (1922).

Critically, the Compact emphasizes *equity* in regulating the Colorado's waters. Article I in the Compact states that its "primary purpose" is for "equitable division" of the Colorado River's waters.[59] The federal law that authorized creating the Compact says something similar, stating that Congress empowered the states to enter a compact to "provide[] for an equitable division . . . of the water supply of the Colorado River."[60]



Colorado River Compact signing in 1922. Courtesy of the Bureau of Reclamation.

Also reflecting this equity principle are the opening remarks of then-Secretary of Commerce Herbert Hoover during the law's passing. Hoover served as chair of the interstate commission that negotiated the Compact. He noted that the commission had been established "to consider and if possible to agree upon a compact between the seven states of the Colorado River Basin, providing for *an equitable division* of the water supply of the Colorado River and its tributaries."[61]

What that text doesn't explain is: What does *equitable division* mean? Equitable division for the states? Or equitable division for the people in those states? We normally think of the states and their respective citizens as one in the same—after all, the states act through representatives elected by the people. But there are important differences. States may balance many interests, and ultimately, acts through a majority via lawmakers. That is different from representing the interests of *all* citizens in a trust relationship, where a minority group's interest must be given consideration, too.

The difference isn't only academic. And it doesn't require diving into the nuances of democracy and representation. The question is: Do individuals have any rights to enforce some fundamental rights to water resources in the

59. Colo. Rev. Stat. Ann. § 37-61-101.

60. Act of Aug. 19, 1921, Pub. L. No. 67-56, 42 Stat. 171, 172.

61. Colo. River Comm'n, Minutes and Record of the First Eighteen Sessions of the Colorado River Commission Negotiating the Colorado River Compact of 1922 at 2 (1922), *available at* http://www.riversimulator.org/Resources/LawOfTheRiver/MinutesColoradoRiverCompact.pdf

Colorado River outside the states and their participation in the Compact and the other laws that make up the Law of the River? The history of the public trust we've already waded through suggests that is so.

States themselves often confirm that the public has an overarching and fundamental right to water that can be enforced regardless of how states feel on the matter. Some, for example, have refused citizen-suits seeking to enforce their public trust rights to water.[62]

The low water mark for states on the public trust right to water is Colorado, which is one of the few states that has not embodied a public trust right to water in its constitution.[63] Although the state says that the public has rights to water, its constitution expressly says that those public rights are "subject to" any private or state interests in water.[64]

Colorado has effectively said that even if every drop of water is drained from its waterways—leaving no water for current and future generations—no public interest in water has been infringed. This despite a Colorado that faces increasing water resources threats.[65] This is also despite state ballot initiatives that have sought to amend the Colorado Constitution to require the state to "adopt and defend a strong public trust doctrine."

But most states, including those in the Colorado Basin, have embodied public trust principles into their constitutions or statues (although, whether and how those states enforce these interests is another matter).

California makes clear by statute and constitution that the public has powerful, fundamental trust-rights in water: "[C]onservation of [] waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare."[66] And California has confirmed these broad public trust rights to water in the courts.[67]

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62. *See* Joseph Regalia, *The Public Trust Doctrine and the Climate Crisis: Panacea or Platitude?*, 11 Mich. J. Envtl. & Admin. L. 1, 15 (2021) (reviewing a large sample of litigation data from cases asserting the public trust doctrine and concluding that "most cases either barely mentioned the [public] doctrine or held that it did not apply to protect the water in dispute").

63. Colo. Art. XVI, § 5.

64. *Id.*

65. JEFF LUKAS ET AL., COLO. WATER CONSERVATION BD., CLIMATE CHANGE IN COLORADO: A SYNTHESIS TO SUPPORT WATER RESOURCES MANAGEMENT AND ADAPTATION 26 (2d ed. Aug. 2014),

https://wwa.colorado.edu/sites/default/files/2021-09/IWCS_2008_Nov_feature.pdf [[https://perma.cc/56FK-2UAE].

66. CAL.WATER CODE § 102 (2018).

67. Marks v. Whitney, 491 P.2d 374 (Cal. 1971).

Arizona also expressly recognizes "public trust purposes" and "public trust values."[68] New Mexico is even broader: "All natural waters flowing in streams and watercourses, whether such be perennial, or torrential, within the limits of the state of New Mexico, belong to the public. . . "[69] Utah as well.[70]

Nevada leaves no doubt: "Water belongs to public. . . .The water of all sources of water supply within the boundaries of the State whether above or beneath the surface of the ground, belongs to the public."[71]

IV. Water Equity for All: Regardless of a Compact, a Statute, or What the States Say on the Matter

The water is running out. And nothing in the Compact's requirements of equity has stopped states from using more water than bodies like the Colorado can maintain.[72]

If states are neglecting to adequately value the public's interest in water, particularly the generation-spanning interests in maintaining water resources in the face of climate change and increasing draught threats—when does the public trust step in to demand more?

Even if states like Colorado were right that its citizens have signed over their rights to water long ago, that is not true in neighboring states. The state-interest theory breaks down where it starts: Citizens in California never signed away their rights to water resources, and Colorado can't retroactively take those rights now.

We are all beneficiaries of the public trust to water. We never gave the U.S. government more than that at the founding, or any time since. So while some states may wish they had those rights, they cannot manufacture them now.

68. Ariz. Rev. Stat. § 37-1101(9). Although note that like many states in the West, Arizona purports to limit those public trust principles to certain uses and waters.

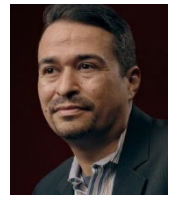
69. N.M. Stat. Ann. § 72-1-1 (2021).

70. Utah Code Ann. § 73-1-1 (West 2010).

71. Nev. Rev. Stat. Ann. § 533.025 (1919)

72. For example, California's Imperial Valley gets more water from the Colorado River for its agriculture than Arizona and Nevada combined. BUREAU OF RECLAMATION, Lower Colorado Basin Region CY 2023 at 5 (Mar. 10, 2023, 3:10 PM), https://www.usbr.gov/lc/region/g4000/hourly/forecast.pdf; *see also* Dan Charles, *Meet the California Farmers Awash in Colorado River Water, Even in a Drought*, NPR (Oct. 4, 2022, 5:00 PM),
https://www.npr.org/2022/10/04/1126240060/meet-the-california-farmers-awash-in-colorado-river-water-even-in-a-drought

Perhaps the threats to water have not often been substantial enough to warrant drastic action to defend the public's trust interests in water. But that is no longer the case.



Tom I. Romero, II[*]

THE COLOR OF EQUITY: OBSERVATIONS OF A BROWN BUFFALO ON INDIGENOUS WATER RIGHTS, JAPANESE INTERNMENT, AND THE SOCIO-LEGAL HISTORY OF THE COLORADO RIVER

"LA VIDA NO ES LA QUE VIVIMOS/Life is Not as It Seems"[1]

In fall of 1942, Robert Casey, the venerated Foreign Service war correspondent for the Chicago Daily News, found himself in Parker, Arizona. From there, he made his way 17 miles south to the "middle of the old Colorado River Indian Reservation" to find "one of those strange creations that have been sprouting all over the country since the declaration of war—vast acreages of wooden buildings . . . miles of wide straight streets, door yards without grass—parks without trees—an atmosphere of dust and sun."[2] What made this city, known as Poston, especially notable was that suddenly and literally overnight, it had become the third largest city in Arizona, the new home of 20,000 Japanese and Japanese-Americans forcibly removed from the entire West Coast of the United States to 10 concentration camps located mostly in the intermountain American West.[3]

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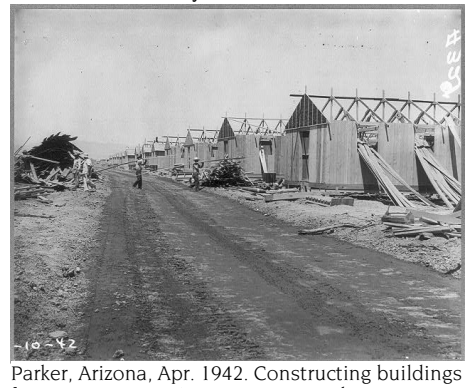
1. OSCAR ZETA ACOSTA, THE REVOLT OF THE COCKROACH PEOPLE 41 (1974).

2. Robert J. Casey, *Japs Accept Evacuation to Arizona Without Resentment*, SEATTLE DAILY TIMES (Oct. 23, 1942), at 34.

3. See PAUL BAILEY, CITY IN THE SUN: THE JAPANESE CONCENTRATION CAMP AT POSTON, ARIZONA (1971); DILLON S. MYER, UPROOTED AMERICANS: THE JAPANESE AMERICANS AND THE WAR RELOCATION AUTHORITY DURING WORLD WAR II (1971); ROGER DANIELS, CONCENTRATION CAMPS NORTH AMERICA: JAPANESE IN THE UNITED STATES AND CANADA DURING WORLD WAR II. REV. ED. (1989); PETER IRONS, JUSTICE

Casey also noted that Poston embodied a host of contradictions. It was at once a "concentration camp" and a "democracy." For Casey, this dichotomy was seemingly resolved as "a sort of communism, in which nobody owns anything and everyone owns everything and wages are pegged for everybody from a farm laborer to a surgeon, at a very modest scale."[4] While Poston was one of dozens of these "strange [wartime] creations," what particularly struck Casey (as if a democratic communist concentration camp was not notable enough) was how water was being "brought down to this particular bit of desert through a 25-mile ditch" to make "green" and abundant land rightfully owned, but forcibly taken from the "Mojave Indians."[5]

Indeed, it was a little over a year earlier, on March 9, 1942, that federal bureaucrats, representing the War Department, the Office of the Interior, and the Office of Indian Affairs discussed the suitability of the Colorado River Indian Reservation to serve as a site to relocate all those of Japanese descent from the West Coast of the United States.[6] Due to its relative proximity to existing Japanese and Japanese American settlement in California, the ostensible availability of land despite the strident objection of the Colorado River Indian Tribal (CRIT) Leadership, and the potential to scale up long-planned, but intermittently started irrigation projects,[7] Poston



Parker, Arizona, Apr. 1942. Constructing buildings for Japanese-American evacuees at the War relocation authority center on the Colorado River Indian Reservation. Courtesy of the Library of Congress.

AT WAR: THE STORY OF THE JAPANESE AMERICAN INTERNMENT CASES (1993); FRANK IRITANI AND JOANNE IRITANI, TEN VISITS: ACCOUNTS OF VISITS TO ALL THE JAPANESE AMERICAN RELOCATION CENTERS. REV. ED (1999); TETSUDEN KASHIMA, FOREWORD IN JEFFREY BURTON ET AL., CONFINEMENT AND ETHNICITY: AN OVERVIEW OF WORLD WAR II JAPANESE AMERICAN RELOCATION SITES (2002).

4. Casey, *supra* note 2, at 34.

5. I*d*.

6. File Rupkey's Final Narrative Report 3-31-45, NAPR-LNO, Box #44, RG 75 Records of the Bureau of Indian Affairs, p. 2.

7. Zimmerman letter to Tolan, dated April 11, 1942, p. 209, House of Representatives, 77th Cong. 2d Session, Report No. 2124, National Defense Migration, Fourth Interim Report; Milton Eisenhower letter to Collier dated March 21, 1942, pp. 210-211, House of Representatives, 77th Cong. 2d Session, Report No. 2124, National Defense Migration, Fourth Interim Report; and NAPR-LNO, Box #6, "A Program for the Utilization of the Colorado River Indian Reservation," November 15, 1940, p. 4.

became Arizona and perhaps the American West's "oddest and biggest boomtown"[8] fed by and wholly reliant on the Colorado River.

Among indigenous and Latinx/e people, it is often said that "water is life,"[9] but as a Brown Buffalo reminds us, "life is not what it seems."[10] This could not be truer when one considers the centrality of "equity" in governing and managing the mighty river that would make Poston and thousands of other communities blossom in the desert. To be sure, the Colorado River Compact's "primary purpose"[11] is "to provide for the equitable division and

8. Casey, *supra* note 2, at 34.

9. Edward Valandra, W*e Are Blood Relatives*: N*o to the* DAPL, Society for Cultural Anthropology: Hot Spots (Dec. 22, 2016), https://culanth.org/fieldsights/we-are-blood-relatives-no-to-the-dapl (explaining Lakota cultural connections to the phrase "water is life"); Rosalyn R. LaPier, W*hy is Water Sacred to Native Americans*?, 8 Open Rivers J. 122 (2017); Margaret E. Montoya, L*atinos and the Law*, National Park Service: American Latino Heritage Theme Study, (last visited Apr. 22, 2023), https://www.nps.gov/articles/latinothemestudylaw.htm ("Agua es vida (water is life) is a widely known dicho or aphorism throughout Latin America and the Spanish Southwest"); T.S. Last, A*cequia Activism*: M*en and women help protect a vital network of irrigation throughout New Mexico*, Albuquerque Journal (Dec. 4, 2015), https://www.abqjournal.com/685714/headline-438.html (explaining the cultural importance of acequias in New Mexico, and that the motto of the state acequia association is "el agua es vida."); Victoria Anibarro, A*gua es la Vida*: W*alking in solidarity with water protectors in Honduras*, University of San Francisco: Master in Migration Studies Blog (last visited Apr. 22, 2023), https://www.usfmasterinmigrationstudies.org/blog/agua-es-la-vida (detailing the visitation of eight environmental activist prisoners in Honduras, and noting the prevalence of the phrase "water is life" amongst water protectors.).

10. Acosta, *supra* note 1, at 41. In my own writing, I have been inspired by Oscar Zeta Acosta's T*he Autobiography of a Brown Buffalo* to provide a critical race theory lens to our understanding of water law and related policies. See: Tom I. Romero, II, T*he Color of Water*: O*bservations of a Brown Buffalo on Water Law and Policy in Ten Stanzas*, 15 Denver Water L. Rev. 329 (2012) and; Tom I. Romero, II, T*he Color of Local Government*: O*bservations of a Brown Buffalo on Racial Impact Statements in the Movement for Water Justice*, 25 SUNY L. Rev. 241(2022). To be sure, the "Brown Buffalo" informs the analysis I make in this essay.

11. Colorado River Compact, art. I (codified at Colo. Rev. Stat. § 37-61-101 (2012)). The phrase ("primary purpose") is drawn from the report prepared for Congress by Herbert Hoover. RAY LYMAN WILBUR & N0RTHCUTI ELY, THE HOOVER DAM DOCUMENTS at A24 (1948), *available at* http://www.riversirnulator.org/Resources/LawOITheRiver/HooverDarnDocs/Hoover Darnl948.pdf.

apportionment waters of the Colorado River System."[12] As so many others have written, however, the division and apportionment of those waters was done by a racially homogenous and elite group of American citizens.[13] It did not include representatives from the myriad of Indigenous nations who had, in almost every case, superior claim to the water that would be divided among each state, nor representation from Mexico to which the Colorado River flowed before emptying into the Gulf of California.[14]

Equity in the compact, however, was never meant to be about the diverse varieties of people (their pride and their history) who had or would call the Colorado River basin their home. A legal fiction created by the United States Supreme Court in its jurisprudence governing the allocation of interstate waters,[15] the concept was both abstract in its balancing of different water rights regimes[16] and precise in its quantification of water.[17] In either case, the enforcement of equity in the Law of the River made sterile and obscure the ways it would reinforce, reify, and re-make the color line in the human lived landscape.

Most importantly, the whole of the Colorado River basin was populated by human communities made by different, but nonetheless connected legal fictions than those codified in Colorado River Compact. To be sure, the Compact provided the only meaningful way by which "worthy" and "desirable"

12. Colorado River Compact, art. I (codified at COLO. REV. STAT.§ 37-61-101 (2012)).

13. Kansas v. Colorado, 206 U.S. 46, 117 (1907)(detailing the doctrine of equitable apportionment in the interstate dispute over the Arkansas River).

14. I*d*.

15. The Compact separated the states into an upper and lower basin each with the right to use of 7.5 million acre-feet of water apportioned in specific amounts to each state. The Act authorizing the negotiations was passed by Congress in 1921. Act of Aug. 19, 1921, Pub. L. No. 67-56, 42 Stat. 171. By 1925, six states had ratified the Compact, but it was not until 1928 that Congress approved it with enactment of the Boulder Canyon Project Act, Pub. L. No. 70-642, 45 Stat. 1057 (1928). The final state to ratify the agreement was Arizona in 1944.

16. Kanas followed the Riparian Rights doctrine while Colorado codified the Doctrine of Prior Appropriation.

17. The Compact separated the states into an upper and lower basin each with the right to use of 7.5 million acre-feet of water apportioned in specific amounts to each state. The Upper Basin States: Colorado (3.86 million acre-feet), Utah (1.72 million acre-feet); Wyoming (1.04 million acre-feet), New Mexico (.84 million acre-feet). The Lower Basin states: California (4.4 million acre-feet); Arizona (2.8 million acre-feet), Nevad (.30 million acre-feet).

migrants could "reclaim" the land;[18] it made meaningful who could be considered "White" and therefore an American citizen;[19] it demonstrated the limits of living as a member of a "domestic dependent nation;"[20] and helped to justify the suspension of constitutional rights in the confiscation of property and the forced resettlement of an entire community to desolate arid landscapes for the "crime" of being either indigenous or Japanese.[21] If equity is defined as fairness and justice,[22] the creation of, operation, and ultimate legacy of what became known as the Poston War Relocation Center on the sovereign lands of the Colorado River Indian Tribes highlights the complexities and complications towards understanding the concept in the legal and larger social history of the Colorado River.

This essay provides a brief overview of the connected history of racial injustice and water development in what came to be known as the Reservation of the Colorado River Indian Tribes and Poston War Relocation Center. Part II connects the related histories of land conquest, irrigation and assimilation, and White supremacy that resulted in creation of the wartime "boom-town" community. Part III turns to some of the ways that "conquered," "colonized," and dispossessed peoples jointly created a sustainable framework of agency and power through their own manipulation and cultivation of water. In so doing, the Japanese internees and Indigenous peoples of Poston provide a more inclusive framework to apply equity in the Colorado River Compact and the larger Law of the River.

18. Tom I. Romero, II, *Ditches and Desirability: Regulating the Flow and Quality of Immigration Through the Doctrine of Prior Appropriation in the 19th and early 20th Century American West*, *in* Beyond the Borders of the Law: Critical Legal Histories of the North American West 170–175 (Katrina Jagodinsky and Pablo Mitchell, eds., 2018).

19. The Naturalization Act of 1790, ch. 3, 2 Stat. 103 (repealed 1795)(requiring one to be either White to become an American citizen). For a legal history of this law, see Ian Haney López, WHITE BY LAW: THE LEGAL CONSTRUCTION of Race (2006).

20. Keith Aoki, *No Right to Own?: The Early Twentieth-Century "Alien Land Laws" as a Prelude to Internment*, 40 B.C. L. Rev. 37, 39–40 n.9 (1998).

21. Cherokee Nation v. Georgia, 30 U.S. 1, 17 (1831)(arguing that indigenous people's were "domestic dependent nations" and that the federal government was akin of "that of a ward to his guardian.")

22. The literature on the dispossession and forced re-settlement of indigenous peoples to reservations in the United States is voluminous. A good overview in context of the arid American West is NED BLACKHAWK, VIOLENCE OVER THE LAND: INDIANS AND EMPIRES IN THE EARLY AMERICAN WEST (2008). For Japanese American internment, see sources cited, supra note 3.

II: "LA VIDA ES EL HONOR Y El RECUERDO/Life is Pride and Personal History."[23]

Congress established the Colorado River Indian Reservation (CRIR) in Southwest Arizona in 1865 "for the tribes of the Colorado River and its tributaries."[24] Comprised of over a quarter million acres, with only half of that land arable, the larger region had been the home of several indigenous communities.[25] Not surprisingly, indigenous oral traditions had long placed water and lack thereof at the center of its culture.

> Quechans, for example, recount the story of Kwikumat and Blind-Old-Man, the creators of all Yuman speakers. Kwikumat and Blind-Old-Man emerged from a large body of water (either Lake Cahuilla or the Gulf of California) and competed over creating the first man and woman. Kwikumat created the Quechans, Kumeyaays, Cocopahs, and Maricopas and instructed Quechan women to marry Quechan men. When one refused, indicating interest in a more handsome Cocopah, Kwikumat angrily destroyed all the Yuman speakers (except the Quechans) by flooding the world with water. After re-creating the world four times, Kwikumat's son thrust a spear into the ground and made the Colorado River, ultimately sending the Quechans, Kumeyaays, Cocopahs, and Maricopas to their new homes nearby.[26]

At the center of most conflict, first among the indigenous peoples, and later the conquest-minded Spaniards, Mexicans, and Americans, "was access

23. Acosta, *supra* note 1, at 41.

24. Karl Lillquist, *Imprisoned in the Desert: The Geography of World War II-Era, Japanese-American Relocation Centers in the Western United States*, 1, 407 (2007).

25. Ann Caylor, A *Promise Long Deferred: Federal Reclamation on the Colorado River Indian Reservation*, 69 PACIFIC HISTORICAL REVIEW 193, 195-196 (May 2000); and NATALE A. ZAPPA, TRADERS AND RAIDERS: THE INDIGENOUS WORLD OF THE COLORADO BASIN, 1540-1859 (detailing Mojaves, Quechans, Cahuillas, Yokuts, Kumeyaays, Maricopas, Akimel O'odhams, Utes, Cocopahs, Yavapais, Southern Paiutes, and many others forged an Indigenous interior world that linked present-day California, Nevada, Utah, Arizona, New Mexico, Sonora, and Baja California).

26. Zappa, *supra* note 25, at 28-29 (noting as well "that the [t]he story of Kwikumat closely corresponds with the chronology of Lake Cahuilla, which experienced at least three cycles of desiccation and flooding between 1200 and 1600").

The Colorado River Indian Reservation in relation to Arizona, California, and Associated Counties. Prepared by U.S. Geological Survey and U.S. Bureau of Mines for U.S. Bureau of Indian Affairs.

to agriculturally productive land and predicable water sources."[27] To be sure, harnessing the promise of the Colorado River was an animating feature of human activity in this region for hundreds of years.

The end of hostilities in the Mexican-American War in 1848 and the subsequent Gadsen Purchase in 1854, exponentially heightened conflict between indigenous and non-indigenous peoples for irrigable land and a predictable water supply. At the time that the United States secured its legal jurisdiction over the land, the Mohaves were the largest Yuman-speaking group living along the Colorado River from what is now the border of Arizona with Nevada and California. Beginning in 1858, open conflict between the U.S. Army and the Mohaves greatly escalated, resulting in the slaughter of Mohave warriors and the subsequent internment of the survivors at Fort Mohave one year later.[28] The Mohaves divided into two groups, one remained at Fort

27. I*d*, at 84, 88-89, 100-101, and 141.

28. NAPR-LNO, Box #6, "A Program for the Utilization of the Colorado River Indian Reservation," November 15, 1940, p. 2.

Mohave, and the other moved south to the lower Colorado River Valley near what is presently Parker, Arizona.

In 1865, the CRIR was established for about 800 Mohaves and 300 Chemehuevi who had already settled on the reservation.[29] The name of the reservation was a "strategic choice" to make it a settlement for all indigenous peoples "whose historic lands encompassed the Colorado River tributaries."[30] The government made several attempts to "convince the Indians living along the Colorado River area in Arizona" to move to the CRIR, but the efforts repeatedly failed.[31] In one case, the government compelled the Walapais (approximately 500 to 800 people) by force of arms to move to the CRIR. When the Army left, the tribe returned to their original homes.[32]

A major factor contributing to indigenous skepticism about the viability of living on the reservation had to do with water development. In April of 1863, Charles Poston, the Territory of Arizona's superintendent of the Office of Indian Affairs ("OIA") argued that his most important duty was the protection of indigenous water rights.[33] Yet, his vision for those rights was predicated on his own Anglo-American centric desire to create an "intense agriculture program" of indigenous yeoman farmers.[34] In 1865, Poston presented Congress both a reservation and irrigation plan for the Mohave, Chemehuevi, and other tribes of the area.[35] According to Poston:

> After a careful investigation of conditions among these Indians, it was determined to select a reservation for them on the bank of the Colorado and ask the Government to aid them in opening an irrigation canal, so they may become industrious and self-supporting . . .. The valley selected for a reservation is called . . . the 'Great Valley of the Colorado' . . .. This reservation would include about 75,000 acres of land, all public domain and

29. See Emilee Ramirez, *Subjugated Lands: Internment, Colonization, and Development on the Colorado River Indian Reservation*, 1942-1960 3 (M.A. Thesis, Cal. St. U. San Marcos), 2019; and Amelia Flores, "Colorado River Indian Tribes," NATIVE AMERICA IN THE TWENTIETH CENTURY 124-127 (1994).

30. Ramirez, supra note 29, at 4 (noting as well by the end of the nineteenth century, most of Arizona's tribes were relocated to their own reservations, thus hindering plans for a pan-ethnic Colorado River Indian Tribes reservation).

31. RUTH Y. OKIMOTO, SHARING A DESERT HOME, at 7.

32. *Id*.

33. David H. DeJong, "See the New Country:" The Removal Controversy and Pima-Maricopa Water Rights, 1869-1879, 33 J. of Az. Hist 367, 367 (1992).

34. Ramirez, supra note 29.

35. Caylor, *supra* note 25, at 197.

> uncultivated. It is proposed to colonize some 10,000 Indians within its boundaries. The estimated expense of opening an irrigating canal here is $50,000 gold, or $100,000 currency.

Importantly, this would be the first federal irrigation project in the American West and in some ways, it set the framework for the Reclamation Act that would become law 37 years later.[36]

As with all Anglo-American irrigation boosters of his time, Poston overestimated the practicality of his plan.[37] Historically, various tribes of the Colorado River Watershed engaged in some scattered agriculture following seasonal flood patterns. They did so, however, without any permanent occupation on the land.[38] Ignoring warnings from both scientists and native residents, Poston operationalized the $100,000 irrigation venture on the CRIT reservation based on the premise of permanent occupancy and colonization of 10,000 indigenous persons.[39]

Poston's dream, however, conflicted with the reality and challenges of water development forced on unwilling and conquered non-White peoples. In 1867, the CRIR's highly touted irrigation system failed due to faulty design or construction.[40] When the water was first turned on, the quantity of water was greater than the system could hold, causing the banks to collapse. Several other attempts were made over the decades to extend water to the CRIR by using "steam pumps, water wheels, windmills, etc."[41] Repeated failures of irrigated agriculture pushed by the OIA failed to produce enough crop for the CRIR residents to sustain themselves, "let alone a market agriculture, and many faced starvation."[42] Despite the repeated failures,[43] OIA continued forward with the same unsustainable vision well into the early decades of the 20th century. Indeed, it was not until 1941, that a viable diversion dam on the Colorado River—the Headgate Rock Dam—was completed.[44]

By the 1930s, federal bureaucrats began to contemplate that Colorado Reservation Tribes were not fit to settle the land or harness the Colorado River for irrigation. For the first time, it was openly suggested that that land of the

36. I*d*.

37. I explore the rule of "irrigation crusaders" in the late 19th century American West and their role in supporting the Reclamation Act. See Romero, supra note 18, at 169-171.

38. C*aylor*, *supra* note, at 195.

39. Ramirez, *supra* note 29 , at 6.

40. Okimoto, *supra* note 31, at 7

41. I*d*.

42. Ramirez, supra note 29, at 6.

43. S*ee generally id*.

44. Okimoto, *supra* note 31, at 7

CRIR would pass into "[W]hite ownership" if indigenous peoples did not relocate to the CRIR and improve its land.[45] John Collier, the Commissioner of Indian Affairs, made the following threat to the Colorado River Tribal Council in 1939:

> The real and practically controlling fact is, the 100,000 acres are going to be irrigated, and you, in the nature of the case, cannot use all of it. Impossible. It will be used either by Indians or white people. If used by white people, it will soon be owned by white people. From your standpoint and that of Indians as a whole, it is better that Indians be located here"[46]

Motivating this threat was the larger water right battles for appropriation of the Colorado River between California and Arizona and the aftermath of operationalizing the Colorado River Compact.[47] Federal officials, particularly OIA bureaucrats, feared they would lose valuable water rights if the irrigation projects remained uncompleted and the land unsettled.[48]

In 1940, the OIA produced a confidential memo planning for the large-scale development of the CRIR.[49] The government reported that despite the original plans for settlement in 1865, only 1,200 Mohaves and Chemehuevis lived on the northern reaches of the reservation and in turn, irrigated by pumps only 7,000 of the 242,711 acres of available land. According to the report, there were approximately 100,000 irrigable acres available for potential development and the Mohave and Chemehuevi could irrigate, at most, 25,000 acres of the northern region.[50] The report, accordingly, contemplated making the remaining land and the long-dreamed irrigation projects available for settlement to additional tribes.

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45. Lillquist, *supra* note 24, at 407; NAPR-LNO, Box #6, "A Program for the Utilization of the Colorado River Indian Reservation," November 15, 1940, p. 17; Ramirez, supra note 29, at 22.

46. "Colorado River Tribal Council Minutes," October 30, 1939.

47. S*ee generally* NORRIS HUNDLEY, JR., WATER AND THE WEST: THE COLORADO RIVER COMPACT AND THE POLITICS OF WATER IN THE AMERICAN WEST (2d ed. 2009) (providing one of the definitive account the Colorado River Compact). The battle between California and Arizona and the water rights claims of indigenous tribes located in these states over the Colorado River was resolved by the United States Supreme Court in A*rizona v. California*, 373 U.S. 546 (1963).

48. NAPR-LNO, Box #7, Water Rights Records, (603) CRIT -The Colorado River Controversy, J. H. Howard, MDW Attorney 09-47.

49. S*ee* "A Program," supra note.

50. NAPR-LNO, Box #6, "A Program for the Utilization of the Colorado River Indian Reservation," November 15, 1940, p. 1-3.

The Japanese Attack on Pearl Harbor in December 1941 did not halt these plans, but instead provided a way to supercharge long-time goals of CRIR settlement and irrigation for non-White peoples. When President Roosevelt ordered the imprisonment of 112,000 Japanese Americans in various camps throughout the American West in 1942, OIA officials saw a way to make their 1940 confidential report and their long-standing vision of non-White colonization a reality. As with the indigenous peoples who were forced onto the reservation in 19th century, the U.S. Government "herded" 18,000 Japanese American detainees "onto this desolate, arid, and unproductive stretch of land."[51] By opening the CRIR as a concentration camp, OIA officials could access additional water rights and "subjugate" the land by "digging irrigation ditches, building canals, leveling the land, and preparing the land for receiving water and planting crops. With the availability of Japanese American detainee labor and the need to channel water to the Poston Camp, the prospect of constructing a workable irrigation system became feasible."[52]

Almost immediately upon the implementation of Executive Order 9066, Commissioner Collier noted the OIA's unique capacity to deal with and ostensibly meet the water and related settlement needs of non-Whites:

> The Interior Department is better equipped than any other agency to provide for the Japanese aliens the type of treatment and care which will make them more acceptable as members of the American population. Available in this connection is the Indian Services' long experience in handling a minority group.[53]

For the OIA, Japanese American internment at Poston was an unprecedented opportunity to build infrastructure for the skeptical and recalcitrant tribes. One OIA official declared that "barracks for the Japanese would be reverted back to the Indians after the war… four or five semipermanent [sic] communities would fit into the needs of the Indian program."[54]

Accordingly, OIA and the War Relocation Authority (the federal agency changed with operationalizing internment), had an explicit agreement that the CRIT living on the CRIR would get their land back after the war, along with all infrastructure "improvements" made to the land, including housing and

51. Okimoto, *supra* note 31, at 5.

52. I*d*. at 7.

53. John Collier, Memorandum to the Secretary of the Interior, March 4, 1942, National Archives, RG 48, File on Internment, pt. 2.

54. Walter Woehlke to John Collier, March 18, 1942 National Archives, RG 75, Box 16.

irrigation.[55] To be sure, what made the Poston Internment camp unique was that it was the only internment camp managed by the OIA, thus aligning its own projects and objectives for indigenous colonization and WRA "mission and goals."[56]

Typical of a benign neglect that would echo in the larger legal and political history of water and land development along the Colorado River, the indigenous peoples of the CRIR were never consulted on the OIA plan or the subsequent agreement between the OIA and the WRA. It was not until April 1942 that John Collier bothered to inform Henry Welsh, Chairman of the CRIT Tribal Council, that the CRIR would be used for Japanese American internment camps and that substantially improved land and irrigated infrastructure would be returned when there was no longer a need for the camp.[57] Opposed morally to a plan that would subject Japanese Americans to the same forced resettlement and control of their labor that they themselves

Parker, Arizona. Henry Welsh, Mojave Indian and chairman of the tribal council of the Colorado River Indian Reservation. Clem Albers, Photographer. Courtesy of the U.S. National Archives and Records Administration.

55. Ramirez, supra note 29, at 8.

56. Okimoto, *supra* note 31, at 6. Okimoto explicitly notes that OIA plans to move CRITs to Poston as "colonization project" and referring to its subjects as "colonists." She indicates that the government may have intended this to mean "an original settler of a colony" or "a group of people with the same interests or ethnic origin in a concentrated area." Yet, colonization is also related to conquest and has a particular resonance on over tribal sovereignty.

57. I*d*. at 8; Ramirez, *supra* note, at 20.

had experienced; and opposed politically to decisions that were made without their sovereign authority; the CRIT community was "in a terrible bind."[58] The CRIT Tribal council was thus left with these choices:

> If they rejected the demands of the WRA and the OIA, they risked permanent loss of the land set aside for Poston to the government or possibly to white farmers. If they agreed to Poston, they would be condoning the presence of a concentration camp on their reservation, which they did not support. Faced with this dilemma, the CRIT Tribal Council decided not to respond.[59]

The OIA initially dedicated 25,000 acres for irrigated agriculture, with a goal to develop 100,000.[60] Part of the job of the Japanese American internees was to clear and level land, build canals and laterals, through up flood levees, and provide drainage.[61] Eventually, they constructed over 40 miles of irrigation canals.[62] Water brought from the Colorado River was used by the Japanese American Internees not only for agriculture, but also for cultural projects and community well-being. Prisoners built traditional Japanese gardens, planted trees and shrubs for shade, and gardens for beauty.[63] The main canal from the Parker Dam (on the Colorado River) also delivered water into the main camp for use as a swimming pool.[64] When the water first arrived in the ditches constructed off of the reservation's irrigation system, the Japanese prisoners "staged a pageant entitled 'the Coming of the Water,'" supposedly on July 4th.[65]

From 1865 to 1945, the forced relocation of Indigenous and Japanese Americans to what was known as the Colorado River Indian Reservation put into sharp relief the lack of equity experienced by non-Whites living along this stretch of the Colorado River. As conquered and interned peoples struggling to maintain not only their pride, history, and dignity, the indigenous tribes of

58. I*d*. at 9.

59. I*d*. at 9.

60. Lillquist, *supra* note 24, at 407; Okimoto, *supra* note 31, at 8; Ramirez, *supra* note, at 25.

61. I*d*.

62. I*d*.

63. I*d*. at 37.

64. CITY IN THE SUN , 100.

65. Online Archive of California, 17. Out-Group Relations, *in* Japanese American Evacuation and Resettlement Records, 1, 131 https://oac.cdlib.org/ark:/28722/bk0013c611k/?brand=oac4 (likely a newspaper clip from the Los Angeles Examiner, but this specific clipping has no title, author, or date).

the CRIR and Japanese Americans were forced to make the irrigation dreams of White men a reality. As Paul Bailey writes in C*ity of the Sun*, "Poston as a government engineer, had visioned Parker Valley, as early as 1864, as filled with settlers, and green with crops. He had drafted an irrigation system to accomplish it—but somehow this desert blossoming had never become a reality. But now, with the newly created Parker dam and its giant canals, it was believed that Poston's dream was to become a living thing…The ambitious and productive Japanese—the world's finest farmers—would accomplish this miracle."[66]

66. Paul Bailey, CITY IN THE SUN (Westernlore Press 1971), 1, 80.

III: POR ESO MAS VALE MORIR CON EL PUEBLO VIVO Y NO VIVIR CON EL PUEBLO MUERTO/ Thus it is better that one die and that the people should live, rather than one live and the people should die.[67]

The CRIR-Poston Interment Camp emerged as a contested site over different and competing visions of racial equity in the ownership, use, access, and distribution of Colorado River water. In this regard, Japanese American Internment on the CRIR and its "return" back to the Colorado River Tribal Council put into sharp relief the color lines inscribed in the legal, political, and social history of the Colorado River Basin.

As soon as it became public knowledge that the CRIR would be a primary and fundamentally different Japanese American Internment Camp, it threatened to disrupt a legally established color geography between Whites and non-Whites that had existed in the lower Colorado River Basin since the mid-19th century.[68] Largely informed by White subjugation of indigenous peoples and anti-Chinese and anti-Japanese racism codified into law, White Americans largely prevented substantive access to water and other real property to those whom the law legally considered non-White.[69] The 1902 Newlands Reclamation Act, for example, prohibited the employment of "Mongolian labor" on any irrigation project.[70] It also required that any

67. Acosta, supra note 1, at 42. The poem, in its entirety.

> "Life is not as it seems.
> Life is pride and personal history.
> Thus it is better that one die
> and that the people should live,
> rather than one live
> and the people should die."

68. As one of the leading textbooks argues, "[t]he federal government willingly acquired new land, but it did not willingly embrace the people inhabiting that land. As for the people within the Mexican cession to the United States, they were left on the margins of American society. A clear sense of racial hierarchy, based on the assumption of white cultural superiority, often led to legal, political, and social exclusion for racial minorities." Clyde A. Mlner, et al, SHARING THE OXFORD HISTORY OF THE AMERICAN WEST, 168 (1994).

69. Romero, supra note 18, at 168-169.

70. Reclamation Act of 1902, ch. 1093, section 4, 32 Stat. 388

beneficiary of reclamation projects comply with all homestead laws, excluding that provision that land would be unavailable to "aliens ineligible for citizenship."[71]

Similarly, all those invited and who participated in the Colorado River Commission and the drafting of what became the Colorado River Compact believed that the water rights, and indeed, the presence of indigenous peoples in the river "were negligible."[72] For this reason, it made the Compact's Federal Indian water rights disclaimer[73] as a meaningless throwaway clause in context of decades-long efforts to eradicate indigenous identity and sovereignty.[74] Simply, water law and policy in the Colorado River Basin and beyond operated no differently than Jim Crow laws in the American South: they relieved the racial anxieties of Whites by limiting the rights of communities of color and segregating and controlling where they could live, work, and play.[75]

The forced resettlement of Japanese Americans from California to the CRIR challenged these expectations. With a population of 20,000 internees at its peak, Poston was "the largest of the ten internment camps both by area and population."[76] The camp reflected the larger demographics of Japanese internment. At least two-thirds of those detained were American citizens, many were young and fully embodied "American" cultural values.[77] Yet, all internees were "[s]tripped of their constitutional rights [and] were never told what crimes they had committed nor given an opportunity to defend themselves."[78] In spite of being prisoners of the WRA, the camp was poorly guarded. In fact, it was enclosed by only a single fence and did not have any watch towers.[79] Due to its location, "the WRA thought it to be so secluded and arid that there was no need for additional protection nor methods to keep the prisoners from running away."[80]

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71. Reclamation Act of 1902, ch. 1093, section 3, 32 Stat. 388

72. Norris Hundely Jr, Water and the West: The Colorado River Compact and the Politics of Water in the American West 211 (2d ed. 2009),

73. "Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes." Compact, supra note, at Art. VII.

74. Jason Robison, Matthew McKinney, and Daryl Vigil, Community in the Colorado River Basin, 57 Idaho L. Rev. 1, 22-35 (2021).

75. Romero, *Color of Water*, supra note 10, at 30-35.

76. Ramirez, supra note 29, at 5.

77. Roger Daniels, *Incarcerating Japanese Americans*, 16 OAH Mag. Hist. 19, 20 (2002).

78. Okimoto, *supra* note 31, at 10.

79. Id., at 5.

80. Id., at 5.

For some observers, the failure to police Japanese American internees was a direct threat to the water security of California's Whites. Newspaper clippings from the Los Angeles Examiner, for instance, stoked repeated fears about Japanese American access to water resources. In one representative account, the newspaper ran an investigative report in November 1943 with the headline: "Unguarded Jap Internees Fish, Picnic, Near L.A. Water Supply."[81] Accompanied by pictures of a small group of Japanese Americans internees fishing, the report detailed the following "facts:"

- "'Interned' Japanese have the 'run of the countryside'"
- "Japanese internees…use Government trucks without supervision"
- The [White] citizens of the small California and Arizona towns, outnumbered by the thousands of Japanese interned at Poston—which is less than 30 miles south of Parker Dam"
- "The Japanese can easily cross the Colorado at many points along the California-Arizona boundary between the Parker and Imperial Dams"
- All this activity occurred "in the area of the Parker and Imperial Dams, from which irrigation and drinking water for California is obtained."

The next day, the Examiner reported that Superior Judge Elmer Heald of Imperial County demanded the state of California open an investigation.[82] According the paper, the Judge was largely responsible for the "deportation of Japanese from the Imperial Valley" and reported his indignation:

> I am utterly amazed at the findings—that these supposedly interned Japanese, whom the War Relocation Authority is allegedly watching over so carefully at the Poston relocation center, actually are running about at will along the banks of the Colorado River, near the Parker and Imperial Dams . . . these dam[s], after all, are supplying us with power, irrigation and water feeding into many military establishments.[83]

Another account made a few weeks later made clear the threat that Japanese American prisoners posed to the water security of Whites. On November 30, 1943, the Headline of the Los Angeles Examiner graphically

81. Sid Hughes, "Unguarded Jap Internees Fish, Picnic, Near L.A. Water Supply," Los Angeles Examiner (Nov. 18, 1943), clipping in Online Archive of California, at 102, 104, 108, 111.

82. "Alarm Crows Over Internees Periling Dams," Los Angeles Examiner (undated) in Online Archive, at 113.

83. Id.

warned: "Armed 'Jap Evacuees' Pouring In State."[84] Building directly on the "startling revelations" from its November 17 Japanese American fisherman story and a parallel investigation by State Senator Jack Tenney, the paper detailed Japanese American threats to all aspects of the daily lives of Californians. Most directly, according to Senator Tenney:

> The obvious conclusion to draw from these facts and which the committee does draw is that it would be ridiculously simple for a group of subversive Japanese to drive either their own or Government motor vehicles into California and to the vicinity of Parker and Imperial Dams, electric transmission lines, railroad trestles, a vast network of irrigation canals and other strategic installations and to destroy them completely.[85]

One small and seemingly overlooked "fact" that the Los Angeles Examiner article report noted, was that the Japanese Americans were receiving treatment better than and fundamentally different from the indigenous people who had been forced onto the CRIR. To provide "evidence," the article made the following claim: "While Indian wards of the Government live in squalor, the WRA has moved the Japanese onto Indian reservations and established them in comparative luxury."[86] While such coverage was designed to stoke racial animosity among not only Whites, but non-Whites against "un-American" and therefore undeserving Japanese American internees,[87] it merely brought attention to unequal, inequitable, and remarkably similar practices experienced by the non-White communities of the Colorado River basin. To be sure, when Japanese Americans learned that they would be interned on indigenous reservation land, many were "wise enough to understand [and] were alarmed at the thought that Japanese Americans were now slotted in with the Indians on a tribal reservation. Knowing the Indian Bureau's dismal record in handling the welfare of their aboriginal charges, they had reason to be doubly worried."[88]

To be sure, the long-time vision of federal bureaucrats to harness the water rights of the Colorado River to irrigate and grow the CRIR was never shared with Japanese American internees.[89] Nor was much effort made to facilitate or allow interaction between Japanese Americans and members of

84. "Armed 'Jap Evacuees' Pouring Into State," Los Angeles Examiner (Nov. 30, 1943), at 1 in Online Archives, page 168.

85. November 30, 1943, at 167.

86. I*d*, *at* 168.

87. Cite to Carbado, Borderlands, American Quarterly piece.

88. CITY IN THE SUN , 79.

89. I*d*. at 96.

the CRIT.[90] The Poston Internment Camp accordingly became a "reservation within a reservation . . . two disenfranchised peoples were held under the watchful eyes of both the Office of Indian Affairs and the War Relocation Authority" to "reclaim" the land from the desert.[91] While these reclamation dreams had always failed, "this time around . .. the large population of Japanese who would be exploited for labor ensured constant care and attention to the agricultural endeavors that were attempted. Combined with [Japanese American] knowledge of farm techniques in similar environments, this form of forced labor seemed to be 'more' efficient than the government's previous plans for reclamation."[92]

On July 2, 1945, Japanese Americans could no longer be held in internment camps.[93] In the case, I*n re* M*itsuye* E*ndo*, the United States Supreme Court held that the federal government could not indefinitely confine "concededly loyal" Japanese American citizens.[94] With the closing of the Poston Internment Camp, the impact of the Japanese Americans internees on turning the paper water of the CRIT into wet water was evident. In three years, Japanese American internees constructed 40 miles of irrigation canals, including laterals and sublaterals to the southern region of the CRIR.[95] This allowed crops to be grown on 1,000 acres of land.[96] Although they did not reach the initial goal of subjugating 10,000 acres to irrigation, they built miles of gravel-surface roads to serve farming, constructed bridges for the vast network of irrigation canals, and successfully planted and harvested forty-two types of crops to serve the residents of the camps on the CRIR.[97] Japanese American internees, accordingly, applied their own expertise and skill in farming to reclaim the land. Such techniques "included seed farms, lath house farm nurseries, and the use of newspapers on seedlings for protection from the harsh temperatures and Arizona dust storms."[98] According to one study, "the fact that Poston focused on crops that would be suitable for the region and that could therefore be sustained after the war suggests that these

90. Okimoto, *supra* note 31, at 13.

91. Don Estes, P*oston* I*nternment*, POSTON PRESERVATION, Japanese American Historical Society of San Diego.

92. Ramirez, supra note 29, at 26; Okimoto, *supra* note 31, at 14.

93. Peter Irons, Justice at War: The Story of the Japanese American Internment Cases, Oxford University Press, 1983, p. 345

94. 323 U.S. 283 (1944).

95. Ramirez, supra note 29, 26.

96. Id, at 30.

97. Id., at 26; Okimoto, *supra* note 31, at 14.

98. Ramirez, supra note 29, at 27.

agricultural endeavors fell perfectly in line with the government's long-term plans."[99]

Yet, the hopes that OIA and WRA officials had for making over 100,000 acres of the CRIR bloom shifted as suddenly as federal policy. In 1942, Dillon Myer, the new head of the WRA, changed the focus of the Poston Internment Camp from one of settlement and colonization to one of relocation.[100] Part and parcel of Myer's larger vision that Japanese Americans (and later Native Americans) should be assimilated into European American culture to "melt or boil" away their language, traditions, cultural values, and beliefs,[101] even limited self-determination of non-White peoples came to be discouraged. By November 1942, only a few months after the camp opened, the reclamation goals were significantly scaled back as a result of anticipated labor shortages and war-time need.[102]

Nevertheless, the immediate post-war years on the CRIR were filled with continual efforts at "colonizing" the reservation to continue the reclamation that the Japanese American internees had started.[103] The effort was codified in what was known as Ordinance No. 5, "Reserving a Portion of Colorado River Indian Tribes for Colonization."[104] The ordinance specified the conditions for the colonization of other indigenous groups from the Colorado River Basin on what had been the Poston Internment Camp in the southern half of the CRIR. They were to be indigenous peoples who lived on tribal land where water resources were inadequate to support "their present . . . population, and returned soldiers of these tribes."[105] The OIA envisioned "tens of thousands" coming from those tribes living along the Colorado River tributaries, including the the Huyalapai, Hopi, Navajo, Apache, Zuni, Papago, Supai, Yuma, Chemehuevi, Mohave, and others eligible upon the CRT Tribal Council's approval settling in the CRIR.[106]

Ordinance No. 5, however, was beset with problematic provisions. It required indigenous peoples who choose to move to the CRIR "to become members of the Colorado River Indian Tribes, thereby giving up their membership and all property connected to their original tribal affiliation."[107]

99. Id. at 26.

100. Okimoto, *supra* note 31, at 13.

101. Drinnon, R., Keeper of Concentration Camps: Dillon S. Myer and American Racism 167 (1987).

102. Ramirez, supra note 29, at 28-29; Okimoto, *supra* note 31.

103. Ramirez, *supra* note 29, at 34.

104. Okimoto, *supra* note 31, at 15.

105. *Id*. at 15.

106. Elliot McIntire, "Hopi Colonization on the Colorado River," T*he California Geographer*, vol. 10 (1969), 9-10; and Okimoto, *supra* note 31, at 15.

107. Ramirez, supra note 29, at 31.

Although it was approved by the CRIT Tribal Council on February 3, 1945 and certified by the Department of the Interior in March, only two months after Executive Order 9066 was rescinded, from the perspective of the CRIT Tribal Council, the provision was forced upon them with the threat of losing sovereignty over their land.[108] In 1949, the Council voted unanimously against Ordinance No. 5, which was the "legal cornerstone of the colonization project."[109] At this time, only a small handful of non-CRIT settlers, all Navajo or Hopi, had relocated to the CRIR. The last non-CRIT colonist settled on the CRIR in 1951 as social, political, and legal conflict ensued between CRIT and non-CRIT tribal members as well as the CRIT Tribal Council and the OIA.[110] The matter was resolved in 1964, when Congress gave ownership of all unallotted land of the CRIR to all original members of the Colorado Indian Tribes as well as certain colonists.[111]

The legacy left by the Japanese American internment is apparent. The Irrigation canals and related water infrastructure constructed by the Japanese American prisoners connected to the Parker Dam, and thus fed by the Colorado River, was built at an estimated $670,000, and all other infrastructure transferred was worth more than $900,000.[112] With sovereignty over the land and the improved infrastructure finally resolved in 1965, the CRIT Tribal Council and the OIA sought capital investment from and leased large plots of farming land to Whites and other non-Indigenous peoples.[113] Within a few short years, these investments totaled up to thirty-five million dollars and private non-indigenous leases accounted for nearly 90% of all farmed land on the CRIR.[114] The reservation now has an annual budget of $28 million dollars, up from a mere $7000 in 1952.[115] CRIT members attribute the

108. SHARING A DESERT HOME, supra note, at 15.

109. Ramirez, supra note 29, at 38.

110. Ramirez, supra note 29, at 37.

111. Public Law 88-302.

112. Thomas Y. Fujita-Rony, P*oston* (C*olorado* R*iver*), DENSHO ENCYCLOPEDIA (Last Updated Oct. 16, 2020) (citing Appraisal Data Vol. II," National Archives Pacific Region (Laguna Niguel), Record Group 270, Records of the War Assets Administration, Box 9, Folder "Colorado River Relocation, Poston, AZ, Appraisal Data Vol. II."),
https://encyclopedia.densho.org/Poston_(Colorado_River)/#cite_note-ftnt_ref13-13.

113. Ramirez, supra note 29, at 42.

114. I*d*.

115. I*d*. at 3.

reservation's present-day wealth directly with the forced labor of Japanese Americans.[116]

This brief history of water development of the Poston Internment Camp and the larger Colorado River Indian Reservation compels us to consider more clearly the human dimensions of the larger Law of the River and its future. Scholars, policy makers, and water law and policy practitioners have all detailed how climate change, overuse, and the rights of competing sovereign state, federal, tribal and nation-state governments compel an on-going and ever present analysis about whether the Colorado River Compact "fulfills its commitment to equity."[117] Lost in almost all of the conversation, however, is how this larger scheme created the conditions for and have perpetuated institutional injustice for the basin's racially minoritized peoples. The CRIR and the Poston Internment Camp suggests water law and policy's inequitable connection to indigenous land displacement, racial segregation, and the perpetuation of a durable color line between White and non-White.

To be sure, our highly narrow, techno-, bureau-, and legal-cratic notions of equity in the Colorado Compact and the future application of the Law of River might need to die in order to make the Basin's diverse and racially minoritized communities not only survive, but thrive. As the perseverance and ingenuity of the CRIT and Japanese Americans who developed and shared water from the Colorado demonstrated, the pursuit of self-determination and cultural sustainability forged on a "reservation within a reservation" provided a sustainable framework by which future water equity might be attained.

116. Teresa Watanabe, *Celebrating a shared history; Indians laud WWII Japanese American internees who developed their land*, Los Angeles Times 1, 2, (Feb. 18, 2008)..

117. Jason A. Robison and Douglas S. Kenney, *Equity and the Colorado River Compact*, 42 ENVTL. L. 1157, 1163 (2012).

*Shelley Ross Saxer**

AN ESSAY ON PUEBLO WATER RIGHTS

Introduction

> The problem of irrigating the arid lands of the Colorado River basin has been confronted by the peoples of that region for two thousand years and by Congress and this Court for many decades.[1]

The Treaty of Guadalupe Hidalgo in 1848 ended the war between Mexico and the United States and Mexico ceded to the United States "present-day states California, Nevada, Utah, New Mexico, most of Arizona and Colorado, and parts of Oklahoma, Kansas, and Wyoming."[2] The Treaty provided for Mexicans living in the ceded lands to become American citizens and recognized their property rights according to Mexican civil law.[3] Unfortunately, "the subsequent history of the treaty is one that resulted in the dispossession of Mexican people from their lands through force, fraud, and

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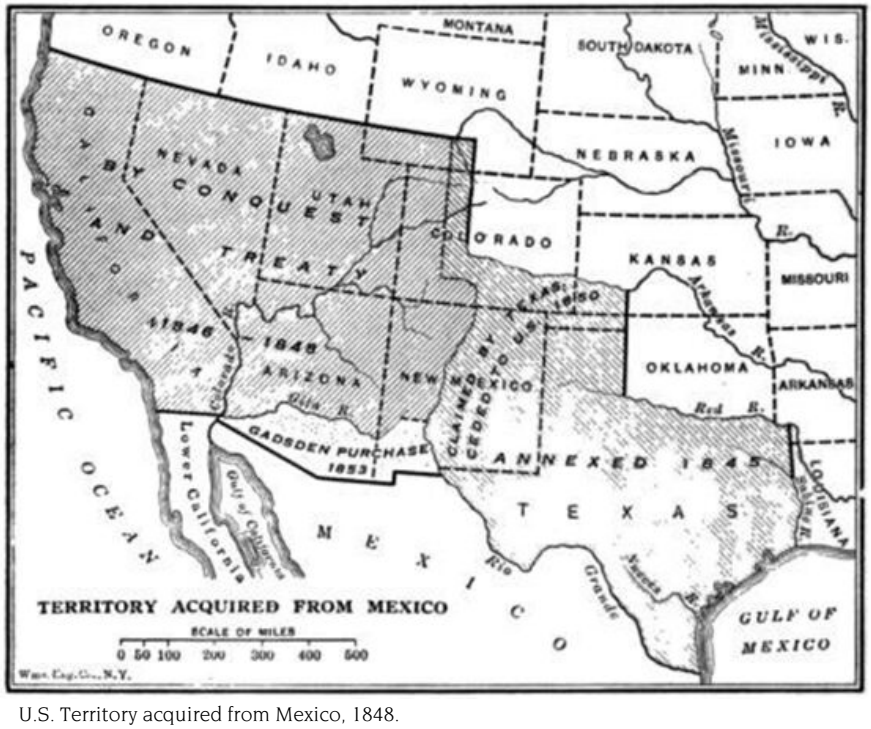
1. Arizona v. California, 460 U.S. 605, 607–08 (1983) (discussing the Colorado River Compact of 1922 and its failure to apportion share of the waters among individual states).

2. National Archives, Milestone Documents, Treaty of Guadalupe Hidalgo (1848)

https://www.archives.gov/milestone-documents/treaty-of-guadalupe-hidalgo#:~:text=This%20treaty%2C%20signed%20on%20February,Oklahoma%2C%20Kansas%2C%20and%20Wyoming.

3. Rebecca Tsosie, *Sacred Obligations: Intercultural Justice and the Discourse of Treaty Rights*, 47 UCLA L. REV. 1615, 1625-26 (2000).

discriminatory practices."[4] The California Supreme Court developed the doctrine of pueblo water rights beginning in L*ux v*. H*aggin*, by interpreting the laws of Mexico under the Treaty to find that pueblos had the power over common lands and a "right to the use of all its waters necessary to supply the domestic wants" of the pueblo.[5] Although Spaniards settled many of these ceded lands in the Southwest, pueblo water rights were only litigated in California and New Mexico,[6] prior to Texas entering the fray in 1984 and rejecting the doctrine.[7]



U.S. Territory acquired from Mexico, 1848.

California first identified pueblo water rights as favoring municipalities over other senior riparians in L*ux v*. H*aggin*.[8] The California Supreme Court declared "[t]he laws of Mexico relating to pueblos conferred on the town authorities the power of distributing to the common lands, and to its

4. I*d*. at 1669.

5. 69 Cal. 255, 326 (1886).

6. Wells A. Hutchins, Pueblo Water Rights in the West, 38 TEX. L. REV. 748, 748 (1960).

7. S*ee* In re Contests of City of Laredo, to Adjudication of Water Rights in the Middle Rio Grande Basin and Contributing Texas Tributaries, 675 S.W.2d 257, 270 (1984).

8. 69 Cal. 255, 326 (1886).

inhabitants, the waters of an unnavigable river on which the pueblo was situated."[9] The court relied on its earlier decision in *Hart v. Burnett*, which held that the pueblo had title to lands within its general limits, to find that the pueblos and their successors are also entitled to the use of water within their limits according to the laws regulating the public and municipal trust.[10]

New Mexico initially adopted the pueblo water rights doctrine in *Cartwright v. Public Service Company of New Mexico*, when confronted with a dispute over the waters of the Gallinas River.[11] The court upheld the claim of water seniority by the Town and City of Las Vegas, New Mexico, and the state water company, over a private user based on the pueblo rights doctrine.[12] Relying on a water law treatise, the court explained that in 1789, "the King of Spain established the Town of Pictic in New Spain and gave the settlement preferred rights to all available water from which evolved the doctrine of Pueblo Rights," and concluded that any new pueblos settled in California, Arizona, New Mexico, or Texas should follow this doctrine.[13] A Texas court in *In re Contests of City of Laredo* subsequently declined to follow California and New Mexico in their recognition of pueblo water rights.[14] Then, in 2004, the New Mexico Supreme court in *State ex rel Martinez v. City of Las Vegas* reexamined and overruled its opinion in *Cartwright*, concluding, "the pueblo rights doctrine is inconsistent with New Mexico's system of prior appropriation."[15]

Under the pueblo rights doctrine, municipalities that began as colonized pueblos established by Mexico or Spain possess a water right that allows them to take as much water from an adjacent watercourse as they need for municipal purposes, even as the population of the municipality increases.[16] California has been the only state to embrace this doctrine,[17]

9. *Id.*

10. *Id.* at 328–29 (citing Hart v. Burnett, 15 Cal. 530 (1860)).

11. 66 N.M. 64, 66–67 (1958).

12. *Id.* at 87–88.

13. *Id.* at 84 (citing 1 Clesson S. Kinney, A Treatise on the Law of Irrigation and Water Rights and the Arid Region Doctrine of Appropriation of Waters 996 [San Francisco, 1912, 2d ed., 4 vols.]).

14. 675 S.W.2d 257, 270 (1984) (declining to follow the opinions of California and New Mexico courts that recognized pueblo water rights).

15. 135 N.M. 375, 376 (2004).

16. *Id.* at 377.

17. Robert E. Beck, *Municipal Water Priorities/Preferences in Times of Scarcity: The Impact of Urban Demand on Natural Resource Industries*, 56 RMMLF-INST 7-1, §7.04 [1] (2010) ("Except for California, courts have rejected the pro-municipality pueblo doctrine.").

while New Mexico and Texas have discarded it as flawed.[18] The pueblo water rights doctrine is not to be confused with the water rights of the Pueblo Indian tribes, as well as other indigenous tribes, which impact water usage in the Southwest. This essay will briefly explore how the pueblo water rights doctrine has been used, or not, in the Western states dealing with municipal water rights and discuss the ongoing controversy over the historical validity of this doctrine. Indeed, "a growing number of water experts, lawmakers, environmental groups and tribes" are challenging California's system of water law as antiquated and inequitable—the pueblo water rights doctrine may end up just one part of this reform.[19]

I. Pueblo Water Rights in California

A treatise on California water law describes the nature of and origin of pueblo water rights in California as follows:

> The colonization of the pueblo lands of California by the Spaniards, and later under the Mexican government, led to establishment of pueblos. These were agricultural settlements with four square leagues (approximately 17,750 acres) of surrounding land. The pueblos were generally founded on the banks of rivers or streams and were given a paramount right to the use of the waters flowing in the pueblos to the extent of the needs of the inhabitants. The laws of Mexico relating to pueblos conferred on the municipal authorities the power of distributing to the common lands and the inhabitants the waters of a non-navigable river on which the pueblo was situated. The property of the nation in the river was transferred to the pueblo, but a species of right to the use of all its waters necessary to supply the domestic wants of the citizens, the irrigable lands, and the mills and manufactories within the general limits was vested in the pueblo authorities, subject to the trust of distributing them for the benefit of the settlers. The citizens (pobladores) were given ditch rights for their irrigable land, and the irrigation of all irrigable

18. *See* State ex rel. *Martinez v. City of Las Vegas*, 135 N.M. 374, 376 (2004) (concluding, "the pueblo rights doctrine is inconsistent with New Mexico's system of prior appropriation); *In re Contests of City of Laredo*, 675 S.W.2d 257, 270 (1984) (declining to follow the opinions of California and New Mexico courts that recognized pueblo water rights).

19. Ian James, '*A foundation of racism*': *California's antiquated water rights system faces new scrutiny*, Los Angeles Times (Mar. 6, 2023), https://www.latimes.com/environment/story/2023-03-06/is-californias-antiquated-water-rights-system-racist.

> tracts, regardless of their proximity to the river, was provided for.[20]

California was a common law riparian rights jurisdiction at the time the California Supreme Court decided the seminal water rights case of *Lux v. Haggin* in 1886.[21] Riparian water rights entitle a person whose land is adjacent to a body of water to make reasonable use of the water so long as it does not unreasonably interfere with the reasonable water use by other riparians.[22] By contrast, the first person to put the water to a beneficial use or purpose will establish senior rights under the prior appropriation doctrine.[23] Indeed, *Lux* "was a key decision in the development of western water law"[24] and reflects California's creation of the prior appropriation doctrine,[25] leading to the hybrid system of riparian and appropriation rights.[26] The dispute in *Lux* was between Miller and Lux as riparian landowners, and Haggin and his Kern County Land and Canal Company as prior appropriators.[27] The court explained the common law riparian rule that "the stream shall flow 'undiminished in quantity' past the lands of all the riparian proprietors" and that "each riparian proprietor is entitled to a reasonable use of the water for irrigation."[28] In *Lux*, the defendants appropriated water from the Kern River and argued that public policy called for the state to recognize the doctrine of appropriation such that the prior appropriator would have the right to divert all waters that would otherwise flow to riparian owners, particularly in regions where the soil and air is arid.[29]

To determine California's law of the land as to water rights, *Lux v. Haggin* looked to the law of Mexico as the former government of the territory and found that Mexico's policy was to protect navigation. However, Mexico also allowed private nonriparians to divert waters from nonnavigable rivers so long

20. 62 Cal. Jur. 3d Water § 60 (2022).

21. Lux v. Haggin, 69 Cal. 255, 265 (1886).

22. https://www.law.cornell.edu/wex/riparian_doctrine

23. *Id.*

24. Eric T. Freyfogle, Lux v. Haggin *and the Common Law Burdens of Modern Water Law*, 57 U. COLO. L. REV. 485, 486–88 (1986).

25. *See* Reed D. Benson, A *Few Ironies of Western Water Law*, 6 WYO. L. REV. 331, 333 (2006) (doctrine of prior appropriation "bubbled up from the mining camps of the California gold rush").

26. Eric T. Freyfogle, Lux v. Haggin *and the Common Law Burdens of Modern Water Law*, 57 U. COLO. L. REV. 485, 486–88 (1986).

27. *Id.* at 494.

28. *Lux*, 69 Cal. at 310–11.

29. *Id.* at 311.

as they met certain conditions.[30] Thus, at the time Mexico ceded California to the United States, only riparian proprietors had the inherent right to use the waters of a stream, "except as to those who actually appropriate waters in the manner and on the conditions prescribed by the laws."[31] The first legislative act of California, after Congress admitted it into the Union in 1850, adopted the common law of England as the rule of decision in the state, which recognized riparian rights.[32] *Lux* declined to adopt the doctrine of appropriation as its sole water rights system.[33] Instead, it upheld the English common law rule as applicable to California, such that riparian proprietors have the right to use water flowing past their land so long as the regular flow of the stream is not disrupted.[34] Nevertheless, *Lux* noted that the California legislature recognized the appropriative rights system beginning in 1854.[35] The resulting hybrid system of water rights in California continued to provoke many legal disputes.[36]

In 1926, the California Supreme Court in *Herminghaus v. Southern California Edison Co.* adhered to the doctrine set forth in *Lux v. Haggin* that a riparian owner "had the right to insist that the full flow of the stream continue to pass by his land in its natural state whether he needed the water or not."[37] This judicial interpretation negated the provisions of the Water Commission Act of 1913, designed by the legislature to subject riparian rights to the rule of reasonable beneficial use.[38] However, in 1928, California amended its Constitution to recognize the doctrine of reasonable beneficial use, putting riparian rights and appropriative rights on the same footing, and in 1933, the California Supreme Court in *Gin S. Chow v. City of Santa Barbara* confirmed that riparian owners were subject to the doctrine.[39] The 1928 amendment did not

30. *Id.* at 321.

31. *Id.* at 324.

32. *Id.* at 337.

33. *Id.* at 350–55.

34. *Id.* at 406–07.

35. *Id.* at 363–68.

36. *The Water Rights Process*, CALIFORNIA WATER BOARDS, STATE WATER RESOURCES CONTROL BOARD (Aug. 20, 2020), https://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.html.

37. Ivanhoe Irr. Dist. v. All Parties and Persons, 47 Cal.2d 597, 622 (1957) (citing *Herminghaus*, 200 Cal. 81 (1926)) (rev'd on other grounds by Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275 (1958)).

38. *Id.* 621–22.

39. 217 Cal. 673, 704–07 (1933) (noting that "[o]ther western states which first adopted the common-law doctrine of riparian rights have effectually changed it to meet modern conditions").

diminish pueblo rights in that the needs of the pueblo already limited the reasonable beneficial use of water.[40]

In 1935, the court in *Peabody v. City of Vallejo* concluded that the 1928 amendment "applies to all water rights enjoyed or asserted in this state, whether the same be grounded on the riparian right . . . or the appropriative right."[41] After the Water Commission Act of 1913 (Act) established a permit process for appropriative rights, California water law gives riparian rights higher priority over appropriative rights, but both are subject to the rule of reasonable beneficial use from the 1928 amendment.[42] Effective in 1914, the Act gave seniority to water rights existing pre-1914 and required permitting and licensing by the Water Commission [predecessor of the State Water Resources Control Board] for appropriative rights post-1914.[43]

The *Lux v. Haggin* court also delved into the laws of Mexico relating to the water rights of pueblos to determine whether a *city* as a successor to a *pueblo* had a right to use the waters of a river where it was located to provide a public benefit.[44] The court held that "the pueblos had a species of property in the flowing waters within their limits, or 'a certain right or title' in their use, in trust, to be distributed to the common lands, and the lands originally set apart to the settlers, or subsequently granted by the municipal authorities."[45] Based on its understanding of the laws of Mexico, the court determined that pueblos had superior rights to water, senior to upper riparians.[46] However, because there was no pueblo established on the water source in controversy, no portion of the waters were restricted to the use of pueblo inhabitants.[47] Subsequently, the California Supreme Court in *Vernon Irrigation Co. v. City of Los Angeles* agreed with the *Lux* conclusion "that pueblos had a right to the water which had been appropriated to the use of the inhabitants" and that the city,

40. 62 Cal. Jur. 3d Water §66 (2022).

41. 2 Cal.2d 351, 383 (1935) (noting that the court "has largely created the water law" of California).

42. The Water Rights Process, *supra* note 22.

43. *California Water Rights Law Reaches Milestone: 100 Years and Counting*, CALIFORNIA WATER BOARDS (Dec. 18, 2014).

https://www.waterboards.ca.gov/press_room/press_releases/2014/pr121814.pdf.

44. *Lux*, 69 Cal. at 326–29 (emphasis in original).

45. *Id.* at 328–29 (relying by analogy upon Hart v. Burnett, 15 Cal. 530 (1860), which held that "the pueblo had a 'certain right or title' to the lands within its general limits").

46. *Id.* at 331–32.

47. *Id.* at 332.

as a successor to the pueblo, had superior water rights as against other riparian owners.[48]

The California Supreme Court continued to recognize the pueblo rights of the City of Los Angeles (City) in *City of Los Angeles v. Pomeroy*[49] and other ensuing disputes over water.[50] In *Pomeroy*, the Court upheld the City's right to take a 315-acre tract of land by eminent domain in order to supplement the original pueblo tract of 4-square leagues and address the future water needs of a growing population.[51] The Court also recognized the City's pueblo water rights in *City of Los Angeles v. Los Angeles Farming & Milling Co.*, stating that the City as a successor to the pueblo has a right "to the use of the water of the river necessary for its inhabitants and for ordinary municipal purposes."[52] In *City of Los Angeles v. City of Glendale*, the Court reaffirmed, "[i]t has long been established that as successor to the pueblo of Los Angeles, the city of Los Angeles has a right, superior to that of a riparian or an appropriator, to satisfy its needs from the waters of the Los Angeles River."[53]

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48. 106 Cal. 237, 250 (1895) (overruled on other grounds by Beckett v. City of Petaluma, 171 Cal. 309, 315 (1915). *See also* Dubordieu v. Butler, 49 Cal. 512, 512-13 (1875) (noting in its statement of facts that the Pueblo de Los Angeles was created in 1784 and after its incorporation in 1850 the city of Los Angeles was entitled to continue appropriating and using the waters of the Los Angeles River); Feliz v. City of Los Angeles, 58 Cal. 73, 78-79 (1881) (recognizing claim of City of Los Angeles to all the waters of the Los Angeles River for almost one hundred years from the time the pueblo was established in 1781).

49. 124 Cal. 597 (1899).

50. *See also* Crystal Springs Land and Water Co. v. City of Los Angeles, 82 F. 114, 124 (1897) (dismissing litigation concerning pueblo water rights in City of Los Angeles for lack of jurisdiction); *Devine v. City of Los Angeles*, 202 U.S. 313, 338–39 (1906) (citing *Crystal Springs* to affirm dismissal for lack of jurisdiction).

51. *Id.* at 603. *See also Pueblo Water Rights*, WATER EDUC. FOUND., http://www.watereducation.org/aquapedia/pueblo-water-rights [https://perma.cc/V5DJ-2X2B] ("Water use under a pueblo right must occur within the modern city limits, and excess water may not be sold outside the city.").

52. 152 Cal. 645, 652 (1908).

53. 23 Cal.2d 68, 73 (1943) ("pueblo right includes the right to all of the waters of the Los Angeles River and the waters supplying it") (citing City of Los Angeles v. Hunter, 156 Cal. 603 (1909)). *See also* City of Santa Maria v. Adam, 211 Cal.App.4th 266, 306 (2012) (noting that the point of the *Glendale* decision "was that both the stream and the basin were subject to the pueblo right" but that in this case pueblo rights are not at issue).

Later, in *City of Los Angeles (City) v. City of San Fernando*, the court reiterated its support for the City's pueblo rights.[54] The court affirmed its acceptance of pueblo water rights as a rule of law based on precedent from the *Lux* and Vernon decisions and rejected a call for abandoning the pueblo water right based on a new historical examination of Spanish-Mexican law.[55] However, the court refused to "extend the pueblo right to encompass ground water in basins" that were not hydrologically connected to the waters of the Los Angeles River.[56] Thus, the City's pueblo right encompassed the ground water in the San Fernando basin, as determined in *City of Los Angeles v. City of San Fernando*, but not the ground water in the Sylmar or Verdugo basins.[57] A pueblo water right applies to both surface and groundwater so long as the waters connect to the water source supplying the city that succeeded the pueblo.[58]

La Plaza and the "Old Plaza Church" (Mission Nuestra Señora Reina de los Angeles) dating from the era of the Pueblo of Los Angeles, c. 1869. There is a square main brick reservoir in the middle of the Plaza at the right, which was the terminus of the town's historic lifeline: the Zanja Madre. Courtesy of the Los Angeles Public Library Photo Collection.

Courts have recognized pueblo rights for San Francisco and San Diego, but have declined to accept a claim of pueblo rights from the City of Santa Cruz.[59] In *City and County of San Francisco v. Le Roy*, the U.S. Supreme Court noted that when Mexico ceded California to the United States, there was a duty to

54. 14 Cal.3d. 199, 231 (1975) (disapproved of on other grounds by City of Barstow v. Mojave Water Agency, 23 Cal. 4th 1224 (2000)).

55. *Id.* at 236–46.

56. *Id.* at 251.

57. *Id.*

58. 62 Cal. Jur. 3d Water §418 (2022).

59. *See* In FA *Hihn Co. v. City of Santa Cruz*, 170 Cal. 436, 444-45 (1915) (the court held that Santa Cruz, as a successor to the Mexican pueblo de Figueroa, was not entitled to greater rights than plaintiff because the pueblo became subject to the United States government by the treaty of Guadalupe Hidalgo in 1850 and the government disposed of these lands in 1866, including the title to which plaintiff succeeded).

protect the rights held by the San Francisco pueblo.[60] Thus, the Court protected the rights of San Francisco, successor to the pueblo, as superior to any claims to the tide-lands or uplands within the pueblo boundary.[61] In City of *San Diego v. Cuyamaca Water Co.*, the California Supreme Court referenced *Lux v. Haggin* as "the longest and most exhaustively treated cause in the history of California jurisprudence."[62] It also noted Justice McKinstry's "most learned and comprehensive dissertation," which relied on *Hart v. Burnett* for determining land rights within the general limits of the pueblo.[63] The court concluded that the City of San Diego possessed rights to the waters of the San Diego River based on its succession to the rights of the original pueblo, which were superior to private appropriations made by the water company.[64] Nevertheless, in *People of the State of California v. Kinder Morgan Energy Partners* LP, the court held that the City of San Diego could not rely on the holding in *Cuyamaca* to assert that it has pueblo rights to the Mission Valley Aquifer groundwater.[65]

In California, riparian, pueblo, and pre-1914 appropriative water rights constitute approximately thirty-eight percent of currently held water rights.[66] The State Water Resources Control Board (SWRCB) regulates licenses and permits for forty percent of state water rights, with the remaining twenty-two percent held by the federal government.[67] The SWRCB has no permitting authority over the 38% of water rights held by riparians, pueblos, and pre-1914 appropriators and thus cannot impose user fees on these rights holders to

60. 138 U.S. 656, 671 (1891). *See also* Knight v. United Land Ass'n, 142 U.S. 161 (1891) (holding "the patent of the government is evidence of the title of the city [of San Francisco] under Mexican laws, and is conclusive, not only as against the government, and against all parties claiming under it by titles subsequently acquired, but also as against all parties except those who have a full and complete title acquired from Mexico") (citing San Francisco v. Le Roy, 138 U.S. 656, 670-72 (1891) as "directly in point").

61. 138 U.S. at 672.

62. 209 Cal. 105, 118 (1930).

63. *Id.*

64. 209 Cal. 105, 131–32 (1930). *See also* City of San Diego v. Sloane, 272 Cal.App.2d 663, 670 (1969) (noting that "[t]he pueblo right attaches only to such water as the City needs and uses at a given time" which is uncertain and depends on the conditions such as rainfall and other sources of supply).

65. 2016 WL 6269716, at *2 (D.C.S.D. California).

66. California Farm Bureau Federation v. State Water Resources, 51 Cal.4th 421, 429 (2011).

67. *Id.*

support the operating costs of the Water Rights Division.[68] As the strain of changing climate weighs heavily on the water supply, researchers have "urged the Legislature to clarify that the State Water Board has the authority to enforce and curtail all water rights, including the oldest 'senior' water rights, called riparian rights and pre-1914 rights."[69]

II. Pueblo Water Rights in New Mexico

The New Mexico Supreme Court in *Cartwright v. Public Service Co. of* N.M. resolved a dispute over water rights to the Gallinas River by finding that the river was the sole source of water for the Mexican pueblo, Nuestra Senora de Las Dolores de Las Vegas, succeeded in interest by the Town and City of Las Vegas.[70] The court recognized that the pueblo "had a vested prior and paramount right to the use of so much of the water of the Gallinas River as was necessary for the Pueblo and its inhabitants, *including the future growth and expansion of said Pueblo*."[71] It followed the Mexican law of water rights, instead of the common law, and held that the pueblo rights doctrine is consistent with the prior appropriation doctrine and the concept of beneficial use.[72] The New Mexico court proposed:

> Many of the cities and towns in the southwestern portion of the United States, notably in California, Arizona, New Mexico, and Texas, were originally founded as Spanish-Mexican pueblos, and, therefore, acquired certain rights to the lands set apart either by special or general ordinance promulgated, either by the King of Spain, under Spanish rule, or by the Government of Mexico, as the successor thereof.[73]

Although New Mexico followed the California courts by temporarily adopting the pueblo rights doctrine in the *Cartwright* decision, neither

68. *Id.* at 430 (these operating costs were previously supported by the state's general fund until 2003).

69. James, *supra* note 16.

70. 66 N.M. 64, 67–68 (1958).

71. *Id.* at 72 (emphasis in original).

72. *Id.* at 80.

73. *Id.* at 81 (quoting Kinney on Irrigation and Water Rights, pp. 2591-93).

Arizona[74] nor Texas[75] adopted the doctrine. The *Cartwright* dissent objected to the majority's reliance on California cases "which have engrained their strained interpretation of the Pueblo Doctrine to the many other apparent hybrid doctrines also existing in that state, including the riparian doctrine and the doctrine of appropriations, all of which constitute a confusing mess of California water rights."[76]

New Mexico persisted in its adoption of the pueblo rights doctrine until 2004, when the New Mexico Supreme Court in *State ex rel. Martinez v. City of Las Vegas* reexamined the pueblo rights doctrine and overruled *Cartwright* as inconsistent with the system of prior appropriation.[77] The court agreed with the State Engineer that the *Cartwright* decision relied on a "flawed analysis of New Mexico water law."[78] Because the pueblo rights doctrine is antithetical to New Mexico water law, the *City of Las Vegas* court found that the expanding nature of the pueblo right is not an existing right under the state constitution and interferes with the state's regulation of water rights.[79] Thus, the court concluded, "the pueblo water right is a 'doctrinal anachronism,' and that it represents a 'positive detriment to coherence and consistency in the law,'" which compels the overturning of *Cartwright*.[80]

Even though New Mexico refused to recognize the pueblo rights doctrine from colonization grants, the Pueblo Indians in New Mexico have a distinct basis for claiming water rights based on centuries of land occupation. These rights are not to be confused with the pueblo water rights of a municipality that has succeeded an original settlement. In *State of* N.M. *ex rel. Reynolds v. Aamodt*, the federal district court adjudicated the water rights to the Tesuque & Nambe/Pojoaque Stream System as to the various water users in the watershed, including the Pueblos.[81] The Pueblos occupied and cultivated

74. For a helpful discussion of Arizona's ongoing water woes, see Rhett Larson & Brian Payne, *Unclouding Arizona's Water Future*, 49 ARIZ. ST. L.J. 465 (2017). *See also* Joseph M. Feller, *The Adjudication That Ate Arizona Water Law*, 49 ARIZ. L. REV. 405 (2007); Peter L. Reich, *The 'Hispanic' Roots of Prior Appropriation in Arizona*, 27 ARIZ. ST. L.J. 649 (1995).

75. *See In re Contests of City of Laredo to Adjudication of Water Rights in the Middle Rio Grande Basin and Contributing Texas*, 675 S.W.2d 257, 270 (Tx.App. 1984).

76. 66 N.M. at 93.

77. 135 N.M. 375, 376 (2004).

78. *Id.* at 383.

79. *Id.* at 388–89.

80. *Id.* at 390.

81. 618 F.Supp. 993, 995 (D.N.M. 1985) (citing State of N.M. v. Aamodt, 537 F.2d 1102 (10th Cir. 1976) (explaining that the 10th Circuit granted the

the land in this watershed before Spanish explorer Francisco Vazquez de Coronado's band arrived in 1540, and continued this occupation throughout the periods of Spanish and Mexican rule until the Treaty of Guadalupe Hidalgo in 1848 when they came into fee simple possession of the occupied property.[82] The United States affirmed the Pueblos' land ownership by executing patents to vest title and the 1924 Pueblo Lands Act recognized the water rights of the Pueblos as to land they owned, while at the same time giving non-Pueblos priority based on the date they applied water to the land they occupied.[83] Thus, the A*amodt* court held that the Pueblos have the prior right to use "the surface waters of the stream systems and the ground water physically interrelated to the surface water as an integral part of the hydrologic cycle."[84] Because the Pueblos' water use "far pre-dated any Spanish or Mexican use," they have priority over any claims to water use by those non-Pueblos who received land grants in the stream system.[85]

The A*amodt* decision was just part of a "decades-long water rights adjudication in the Pojoaque Basin of New Mexico" that began in 1966 when New Mexico filed suit to adjudicate water rights in the Basin.[86] Settlement negotiations started in 1999 and Congress agreed to a proposed settlement in 2010.[87] New Mexico submitted a settlement for district court approval in 2013, providing in part "that each Pueblo has a first-priority right, senior to all other users for a specified maximum amount of water."[88] The district court issued an order to show cause to allow Basin water users to object to the settlement.[89] After considering some eight hundred objections submitted, the court issued its final judgment in 2017.[90] On appeal, the Tenth Circuit held that the objectors, as non-settling parties, lacked standing to challenge the settlement, as they were unable to demonstrate "plain legal prejudice nor

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Pueblos the right to intervene in the lawsuit where the United States purported to represent their interests)).

82. I*d*. at 996, 1001.

83. I*d*. at 1010. S*ee also* Pueblo of San Ildefonso v. U.S., 35 Fed. Cl. 777, 782 (1996) (stating that Congress enacted the Pueblo Lands Act of 1924 "[t]o resolve the question of non-Indian settlers' claims to pueblo lands").

84. 618 Fed.Supp. at 1010.

85. I*d*. at 1000.

86. New Mexico ex rel. State Engineer v. Carson, 908 F.3d 659, 664 (10th Cir. 2018).

87. I*d*. (citing the Claims Resolution Act of 2010 authorizing 'the Secretary of the Interior and the Bureau of Reclamation to design and build the Regional Water System").

88. I*d*.

89. I*d*.

90. I*d*. at 665.

injury in fact."[91] The court remanded the case to vacate, for lack of standing, the segment of the district court's order that addressed the objections, while preserving the district court's approval of the settlement.[92]

Pueblo Indian water rights include those water rights appurtenant to the Pueblo "Spanish grant" lands as well as to other lands reserved by congressional or executive actions, or purchased by the Pueblos.[93] These rights do not fit neatly into the framework of U.S. Indian water law as some of them are state-based water rights or federally reserved water rights, while the Pueblo water rights associated with Spanish grants are neither.[94] The U.S. Supreme Court in the landmark decision *Winters v. United States*[95] formed the concept of federally reserved Indian water rights by holding that the 1888 agreement creating the Fort Belknap Reservation in Montana, reserved the waters of Milk river and exempted them from appropriation under state law.[96] However, Pueblo lands were not subject to federally reserved rights under the *Winters* doctrine as the Pueblos did not enter into treaties with the United States and there was no federal reservation of their lands.[97]

While Pueblo Indian water rights are not the focus of this essay, the history of the Pueblo people and "the convoluted history of Pueblo lands" demonstrate the uncertainty of the water rights held by the Pueblo Indians and other water users in New Mexico.[98] Most recently, the Tenth Circuit in *United States v. Abouselman* addressed litigation filed in 1983, involving the adjudication of water use among the Pueblos, other basin water users, and the State of New Mexico in the Rio Jemez.[99] The Tenth Circuit answered "a discrete purely legal issue from that ongoing, decades-long litigation: "[W]hether the Pueblos' aboriginal water rights were extinguished by the imposition of Spanish authority without any affirmative act."[100] The court held "that a sovereign must affirmatively act to extinguish aboriginal water rights," reversing and remanding the case to the district court.[101]

Richard W. Hughes, a certified specialist in the field of Federal Indian Law and one of the many litigators involved in these adjudications, stated,

91. *Id.* at 665–66.

92. *Id.* at 667.

93. Nicolai Kryloff, *Pueblo Indian Water Rights: A Historical Overview*, 2021 NO.3 RMMLF-INST3, *3-1.

94. *Id.*

95. 207 U.S. 564 (1908).

96. Kryloff, *supra* note 86 at *3-2.

97. *Id.* at *3-3.

98. *Id.* at *3-9.

99. 976 F.3d 1146, 1150 (10th Cir. 2020).

100. *Id.*

101. *Id.*

"the actual task of determining what rights the Pueblos hold has turned out to be an excruciating process, Byzantine in its complexities and hugely frustrating in its glacial pace."[102] Hughes points out that although Pueblos do have some "reservation" lands set aside by U.S. officials with federally reserved water rights, Pueblo grant lands differ from other Indian tribal rights covered by the *Winters* doctrine.[103] In conclusion, Hughes notes:

> There is some irony in the fact that under the *Winters* doctrine, tribes with no substantial agricultural background have been awarded relatively huge water rights, while the Pueblos, who mastered irrigated agriculture a millennium ago, have had their claims of rights based on irrigable acreage so fiercely resisted, and have had to struggle to obtain modest settlement-based water rights.[104]

With no clear guidance on the rights of Pueblos, particularly as to the adjudication of water rights to the Rio Grande—bordered by nine Pueblos and already over-appropriated—hope springs eternal that the *Abousleman* litigation will eventually provide answers.[105]

III. Pueblo Water Rights in Texas

The Texas Supreme Court documented the development of Texas water law from 1840 in *In re Adjudication of the Water Rights of the Upper Guadalupe Segment of the Guadalupe River Basin*.[106] Texas judicially adopted the riparian rights system by 1856 and included a reasonable use requirement as early as 1868.[107] The Irrigation Act of 1895 began a dual system of Texas water law, which created a system of appropriation licensing of water not encumbered by historical riparian rights.[108] The Irrigation Act of 1913 centralized the licensing process and established the central principle of Texas water law that "[s]tate-owned water can be appropriated only pursuant to a permit issued by

102. Richard W. Hughes, *Pueblo Indian Water Rights: Charting the Unknown*, 57 NAT. RESOURCES J. 219, 222 (2017) (describing in detail the history of the six cases filed by the State Engineer of New Mexico, as well as three subsequently filed cases, involving Pueblo Indian water rights).

103. *Id.* at 240–41.

104. *Id.* at 260.

105. *Id.*

106. Hans W. Baade, *The Historical Background of Texas Water Law – A Tribute to Jack Pope*, 18 ST. MARY'S L.J. 1, 4 (1986) (citing 642 S.W.2d 438 (Tex. 1982)).

107. *Id.*

108. *Id.* at 6–7.

the competent state agency."[109] This current water system "is not linked historically to Spanish or Mexican law" and is instead based on the common law riparian system recognized until 1895.[110] The Water Rights Adjudication Act of 1967, codified in the Texas Water Code, harmonized the rights of riparians and appropriators by distinguishing between "non-statutory" and "statutory" water rights and adjudicating water rights based on the law of water licenses.[111]

In *State of Texas v. Valmont Plantations*, the appellate court evaluated a dispute between appropriators and riparians and held that "[l]ands riparian to the Lower Rio Grande do not have an appurtenant right to irrigate with the river waters."[112] The Texas Supreme Court affirmed and adopted this decision in *Valmont Plantations v. State*,[113] holding that the original Spanish and Mexican grants did not include an implied right of irrigation.[114] This judicial opinion referred "to the early Spanish commentators and to a host of other sources," including supreme judicial decisions in Spain.[115] Despite this holding that implied water rights did not exist in Texas, the Texas Court of Appeal "revisited the issue of implied water rights in a claim asserted by the city of Laredo."[116]

In 1984, the Court of Appeal of Texas, Austin, addressed the question of whether Texas recognized the pueblo water rights doctrine in *In re Contests of City of Laredo to Adjudication of Water Rights in the Middle Rio Grande Basin and Contributing Texas Tributaries*.[117] The court defined the pueblo water right as "the paramount right of a town or city of this country as successor of a Spanish or Mexican pueblo, to the use of water naturally occurring within the old pueblo limits for the use of the town or city and its inhabitants. . . [which] is expandable as the size of the successor-town or –city increases."[118] The *City of Laredo* court found that the Spanish government confirmed Laredo as a Pueblo in 1767 and granted it four leagues of land on the Rio Grande riverbanks.[119] However, the Texas court refused to rely on the *Lux* decision from California

109. *Id.* at 7–8 (noting that Texas water law is based on water permits administered by the Texas Water Commission).

110. *Id.* at 9.

111. *Id.* at 15.

112. 346 S.W.2d 853, 882 (Tx.App. 1961).

113. 163 Tex. 381 (1962).

114. *Id.* at 383-84.

115. Eric B. Kunkel, *The Spanish Law of Waters in the United States: From Alfonso the Wise to the Present Day*, 32 McGEORGE L. REV. 341, 348-49 (2001).

116. *Id.* at 359.

117. 675 S.W.2d 257, 259 (Tx.App. 1984).

118. *Id.*

119. *Id.* at 262.

and the *Cartwright* decision from New Mexico.[120] Instead, it concluded that "[t]he law of New Spain did not expressly create a municipal water right in the nature of a pueblo water right" and declined to recognize the pueblo water rights doctrine in Texas.[121]

It appears that a Texas Law Review Article, published two years after the *Cartwright* decision, heavily influenced the Texas court's decision not to recognize the pueblo water rights doctrine.[122] The Article's author, Wells Hutchins, criticized the New Mexico Supreme Court's adoption of pueblo rights in *Cartwright* based on its reliance on the law of California rather than the law of Spain or Mexico.[123] Hutchins acknowledged that "much has been learned about Spanish and Mexican Laws relating to water," since the California Supreme Court decided *Hart v. Burnett* in 1860 in support of the pueblo water rights of San Francisco.[124] Nevertheless, California courts have held that the pueblo water rights cases are *stare decisis* and can no longer be challenged.[125] Not only did Texas refuse to follow California's and New Mexico's recognition of pueblo water rights, but the New Mexico Supreme Court in *State ex rel. Martinez v. City of Las Vegas* reexamined the pueblo rights doctrine and overruled *Cartwright* as inconsistent with the system of prior appropriation.[126]

IV. The Future of Pueblo Water Rights

By way of introducing a panel of speakers discussing "issues and history relating to water resources in the American West," Professor Reed Benson identified some of the ironies of western water law.[127] The first great irony as to the prior appropriation doctrine is that "a legal system that arose from the relatively lawless mining camps of the Wild West would come to be viewed as though it had been handed down directly from God."[128] The second great irony is "that a system based on 'first in time, first in right' would cut against those people who had lived in the West for thousands of years before anyone

120. *Id.* at 270.

121. *Id.*

122. *Id.* at 269–70 (quoting Wells A. Hutchins, *Pueblo Water Rights in the West*, 38 TEXAS L. REV. 748, 758 (1960)).

123. *Id.* at 270.

124. See Wells A. Hutchins, *Pueblo Water Rights in the West*, 38 TEXAS L. REV. 748, 758–59 (1960) (citing Hart v. Burnett, 15 Cal. 530 (1860)).

125. *Id.* at 759.

126. 135 N.M. 375, 376 (2004).

127. Reed D. Benson, *A Few Ironies of Western Water Later Law*, 6 WYO. L. REV. 331, 331 (2006).

128. *Id.* at 333.

thought of prior appropriation."[129] The third great irony is "that the region with the world's first national park would take so long to recognize recreation and resource protection as beneficial uses of its waters."[130] The final irony Benson identified as an example of the many ironies "show[ing] that western water law and policy cannot practically be reduced to a few basic principles,"[131] is that "while repeatedly acknowledging that the states have primary authority to allocate water resources, Congress effectively made it a federal responsibility to build water projects to develop these resources."[132]

Ironies in Western water law aside, courts and scholars have consistently challenged the pueblo rights doctrine as incongruous with the history of the laws of Spain and Mexico regarding water usage. Professor Peter Reich ascertained from historical study that the purpose of pueblo organizations in Spanish and Mexican laws "was the promotion of political stability, so the preservation of community use rights and dispute resolution by consensus were more important than individual private property interests."[133] Yet land speculators and settlers convinced the new American political authorities in place after the 1846 conquest to privatize what had been community use rights under the Hispanic land system.[134] Municipalities throughout California disposed of pueblo property and American judges were called upon to resolve land disputes, knowing that these "municipal land sales were inconsistent with the Hispanic laws they were required to enforce under the Guadalupe Hidalgo Treaty's property-protection provision."[135] Although the California Supreme Court initially decided cases in the 1850s based on the view that municipalities/mayors (alcaldes) did not have power under Hispanic law to sell pueblo land, later court decisions overruled these earlier cases and concluded "*alcaldes* had unrestricted power to grant lots within the pueblo."[136] In *Monterey v. Jacks*, the California Supreme Court upheld the bankrupt city's 1859 sale of all of its pueblo lands to a land speculator to satisfy its debt, concluding that the city could not invalidate the sale later on because it was ratified by legislative action in 1866.[137] Reich contends that the *Monterey* court "failed to cite any Hispanic law or custom in support of its

129. *Id*. at 334.

130. *Id*. at 335.

131. *Id*. at 336–37.

132. *Id*. at 336-37.

133. Peter L. Reich, *Dismantling the Pueblo Hispanic Municipal Land Rights in California Since* 1850, 45 AM. J. LEGAL HIST. 353, 357–58 (2001).

134. *Id*. at 358.

135. *Id*. at 359–60.

136. *Id*. at 367.

137. *Id*. at 368. (citing City of Monterey v. Jacks, 139 Cal. 542, 556–57 (1903)).

position" and there was no evidence "that Spanish or Mexican governments had ever authorized a pueblo to alienate all of its pueblo lands.[138]

The California Supreme Court's holding in *Hart v. Burnett* that the pueblo had a vested interest in the lands within its general limits[139] led to the recognition of pueblo water rights beginning in *Lux v. Haggin*.[140] Professor Reich argues that the California Supreme Court in *Vernon Irrigation Co. v. City of Los Angeles*[141] followed *Lux* and "created the pueblo water right out of whole cloth," and then in *Los Angeles v. Pomeroy*,[142] it expanded the right "by speculating as to what Hispanic custom or law would have comprehended."[143] After examining court files from pueblo water rights decisions, Reich concludes, "judges deliberately idealized Hispanic law to justify urban water monopolization."[144]

California's recognition of pueblo water rights in *Vernon Irrigation Co. v. City of Los Angeles* required the California Supreme Court to examine "the nature of the right which the pueblo had to the water of the river under the Spanish and Mexican Laws."[145] The court acknowledged the difficulty that those familiar with the common law would have in understanding of the laws of Spain and Mexico.[146] However, it evaluated the voluminous Spanish and Mexican documents put in evidence for the case and assessed the differences between pueblos and current municipalities, including this prescient observation:

> Perhaps the most important respect in which the pueblos and the habits of the inhabitants differed from our municipalities and the habits of our people is found in the extent to which individual wants were supplied from public or common lands. In this respect the difference is almost startling. Our practice is to reduce everything to private ownership from which a profit can be made; and, of course, the more essential it is to the members of the community, the more profit can be made from it. The rule of the pueblo was almost the reverse of this. So far as communal

138. *Id.*

139. 15 Cal. 530, 616 (1860).

140. 69 Cal. at 328–29.

141. 106 Cal. 237, 250 (1895) (overruled on other grounds by Beckett v. City of Petaluma, 171 Cal. 309, 315 (1915).

142. 124 Cal. 597 (1899).

143. Peter D. Reich, *Mission Revival Jurisprudence: State Courts and Hispanic Water Law Since* 1850, 69 WASH. L. REV. 869, 896 (1994).

144. *Id.* at 906.

145. 106 Cal. 237, 244 (1895).

146. *Id.*

> ownership would answer the purposes of the community, it was preferred. As water was one of the things thus held, we may understand better the nature of the right which the pueblos had to it by considering other properties so held.[147]

In the New Mexico Supreme Court's decision, *Cartwright v. Public Service Co.*, dissenting justices criticized the majority for recognizing pueblo water rights in reliance on California decisions that "stretched the meaning and contest of the plan [of Pitic] out of proportion and beyond its original intended meaning for colonization."[148] The dissent "reiterate[d] that this Court should not blindly follow the California decisions, the result of which would be to disrupt water titles throughout the length and breadth of the State of New Mexico, titles and property rights which have reposed unmolested and have been passed upon and recognized for centuries."[149] As discussed above, New Mexico eventually discarded the pueblo water rights doctrine and Texas declined to adopt the doctrine, undoubtedly influenced by the *Cartwright* dissent and the writings of Wells A. Hutchins.[150]

California stands as the only state in the West that recognizes pueblo water rights[151] and given the doctrine's criticisms, it is unlikely any other state will adopt it in the future. The doctrine as applied in California has resulted in the "monopolization of a scarce resource by a few cities and landowners" in place of the historical "Spanish and Mexican communal water sharing, by which the needs of various users were apportioned, [ ] a system well-suited to the arid frontier."[152]

In his book, The Mythical Pueblo Rights Doctrine: Water Administration in Hispanic New Mexico, Daniel Tyler argues that the pueblo rights doctrine "simply does not fit with the social, political, and economic landscape of Hispanic New Mexico," which required municipalities to share the scarce water resources, allocate water, and resolve disputes among users.[153] Tyler concluded:

147. *Id.* at 244–46.

148. 66 N.M. 64, 97–98 (dissent) (1958).

149. *Id.* at 99.

150. *Pueblo Water Rights in the West*, *supra* note 124.

151. Robert Beck, *Municipal Water Priorities/Preferences in Times of Scarcity: The Impact of Urban Demand on Natural Resource Industries*, 56 RMMLF-INST 7.04-1 (2010).

152. Peter L. Reich, *Mission Revival Jurisprudence*, *supra* note 138 at 925.

153. Daniel Tyler, The Mythical Pueblo Rights Doctrine: Water administration in Hispanic New Mexico, Texas Western Press, University of Texas at El Paso, Southwestern Studies Series No. 91 pg. 13–14 (1990).

> After reviewing extant Hispanic documents of New Mexico, the only supportable conclusion is that no municipal entity, Indian or non-Indian, had a right to enlarge its claim to water without consideration of the legitimate needs of other users, individuals, or communities. Equitable, or proportional, distribution was the objective, and although this might seem idealistic when viewed from today's perspective, both Spaniards and Mexicans developed a system of sharing which they hoped would function in avoidance of costly litigation. Absolute water rights were inconsistent with Spanish thinking and inappropriate to the New Mexican environment. Thus, the pueblo rights doctrine can only be seen as unhistorical and fictitious—an invention of modern minds that failed to read the record left by the Spanish and Mexican people of New Mexico.[154]

V. Conclusion

As the West struggles to deal with a growing population and the uncertainty of life in an arid land, California's recognition of pueblo water rights may be subject to reform for its lack of historical validity from Spanish and Mexican law and its continuing viability based only on *stare decisis*. California's system of water law is arcane and dates back to a time "when the state government promoted the extermination of Native people to make way for white settlers."[155] With the entire water rights system subject to attack and calls for reform, pueblo water rights are just one piece of the puzzle that is California water law. Because its origins in Spanish and Mexican law are questionable, pueblo rights stand on no higher ground than riparian rights and the prior appropriation doctrine, based on a miner's rights to mine gold.

With studies indicating that the entire water rights system in California is based on racism and violence, calls to reform or completely abolish the system are gaining traction as we confront climate change with decaying infrastructure and obscure laws.[156] Proposed legislation aims to "help the State Water Board and curb illegal water diversions."[157] Another suggestion to fix California water laws is to recognize that water rights are not private property—they are usufructuary rights (the right to use), subject to

154. *Id*. at 45.

155. Ian James, '*A foundation of racism*': *California's antiquated water rights system faces new scrutiny* L.A. TIMES (March 6, 2023),
https://www.latimes.com/environment/story/2023-03-06/is-californias-antiquated-water-rights-system-racist.

156. *Id*. (citing Richard Frank).

157. *Id*.

government control as a public resource.[158] Professor Dan Tarlock discussed California water law reform based on a major study that recommended four essential reforms.[159] The first suggested reform to groundwater rights resulted in the 2014 Sustainable Groundwater Management Act, which relies on local and regional governments, rather than statewide regulation.[160] The second recommendation—to more effectively regulate riparian rights and pre-1914 appropriative rights—is still awaiting attention by the legislature.[161] The third reform to improve water accounting was addressed in 2009 and 2015, and the fourth recommendation—to strengthen water transfers law—is waiting for legislative action.[162] Tarlock also mentioned the more radical proposal "to replace prior appropriation with the Australian system of non-priority volumetric entitlements."[163] This change in California's water system would replace prior appropriation with a system based on entitlements to "to shares of yearly or seasonably available water" and "pro rata sharing in times of drought."[164]

It often appears that attention to the problems of water in California waxes and wanes depending on the severity of the current drought situation. The California Department of Water Resources lists on its website the notable historical droughts as 1976-77, 1987-92, 2007-09 and the most recent five-year event of 2012-2016.[165] A recent study indicates that the period from 2000-2021 "was the driest 22-yr period since at least 800" in the southwestern region of North America.[166] Indeed, Lake Mead and Lake Powell, two of North America's largest reservoirs located on the Colorado River, were at their lowest recorded levels in 2021.[167] At the time of writing this essay, nine atmospheric river

158. *See, e.g.*, Shelley Ross Saxer, *Managing Water Rights Using Fishing Rights as a Model*, 95 MARQ. L. REV. 91 (2011).

159. Dan Tarlock, *California Adapts to Prolonged Drought: Any Lessons for the Humid Midwest?*, 51 VAL. U. L. REV. 519, 540 (2017).

160. *Id.* at 541.

161. *Id.* at 540.

162. *Id.*

163. *Id.*

164. *Id.*

165. https://water.ca.gov/drought#:~:text=California%20is%20no%20stranger%20to,in%20the%201920s%20and%201930s.

166. A. Park Williams, Benjamin I. Cook and Jason E. Smerdon, Rapid intensification of the emerging southwestern North American megadrought in 2020-2021 https://www.nature.com/articles/s41558-022-01290-z.epdf

167. Paul Rogers, Current drought is worst in 1,200 years in California and the American West, new study shows, The Mercury News (Feb. 15, 2022).

storms had already pelted California in early 2023 in one of its wettest winters on record.[168] It is now expected that this wet winter of 2023 will help ease drought conditions with less than half of the state still under drought conditions as compared to December 2022, when all of the state was classified as under drought.[169] Unfortunately, the multi-decade Western drought has significantly affected the Colorado River's ability to supply water to seven Western states, including California, which has higher priority rights to the water over the other six states.[170] Eric Kuhn, a former general manager of the Colorado River Water Conservation District, has suggested that California, Arizona, Nevada, and the tribal communities in the Lower Basin states under the 1922 Colorado River Compact follow the lead of the Upper Basin states, which negotiated their own compact in 1948.[171] However, until that happens, the river remains over-allocated and the priority of water rights will not protect the Western states against long-term drought and climate change.

The Colorado River crisis does not disturb the pueblo water rights doctrine adopted by California and retained as a matter of *stare decisis* and reliance interests. Given California's temporary respite from drought conditions following one of the wettest winters on record in 2023, the lack of political and individual resolve to deal with California's obscure water rights system may delay any meaningful reform. California recognizes the pueblo water rights with no limit on the actual needs of the city, which may grow with population increase or the extension of city limits by annexation of land outside the limits of the original pueblo.[172] Both Texas and New Mexico have rejected the pueblo water rights doctrine as inconsistent with the prior appropriation system and historically inaccurate, since no entity should have a right to expand its claim to water usage without considering the legitimate

https://www.mercurynews.com/2022/02/14/current-drought-is-worst-in-1200-years-in-california-and-the-american-west-new-study-shows/

168. https://www.latimes.com/environment/story/2023-03-07/california-forecasters-warn-of-approaching-atmospheric-river

169. https://www.latimes.com/california/story/2023-03-02/more-than-16-percent-of-california-no-longer-in-drought

170. https://www.cbsnews.com/news/colorado-river-biden-environmental-analysis-water-usage/

171. Eric Kuhn, Opinion: California and its neighbors are at an impasse over the Colorado River. Here's a way forward,

https://www.latimes.com/opinion/story/2023-02-27/california-colorado-river-water

172. *See Pueblo Water Rights in the West*, *supra* note 124 at 751 (noting that "if the needs of the city justly demand the whole natural supply, the city may take it all").

needs of other water users.[173] However, the Pueblo tribes in New Mexico have continued to demand their rightful Native American water rights from the federal government to support their domestic and agricultural needs.[174]

California must reconsider its assertion of senior water rights under the Colorado River Compact of 1922 and the entitlement of certain cities to an unlimited water supply under the pueblo water rights doctrine. The California water rights system continues to be "a mess" with "outdated laws and antiquated attitudes" that "actively hinder[] the state's ability to ensure everyone has enough water."[175] While senior water rights holders have "a huge interest in keeping the system exactly the way it is, even if it means hurting other people—which it does," the real problem is that there just isn't "enough water to go around."[176] Even though California water politics encourage the belief that water rights are subject to private ownership, under its state constitution water is a public resource and private parties only have a right to use it.[177] As we move into climate change adaptation, conservation and sharing the water we do have are key requirements for our continuing survival and prosperity.

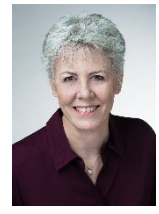
173. *See The Mythical Pueblo Rights Doctrine*, *supra* note 153 at 45.

174. https://www.kunr.org/energy-and-environment/2023-04-10/upstream-battle-new-mexico-pueblo-resolve-water-rights-decades-of-negotiations

175. Sammy Roth, Even in drought, CA water rights politically toxic, The Desert Sun (Oct. 5, 2015).c https://www.kunr.org/energy-and-environment/2023-04-10/upstream-battle-new-mexico-pueblo-resolve-water-rights-decades-of-negotiations

176. *Id.*

177. *Id.*



Margaret Vick, JSD*

A TALE OF WATER LANGUAGE IN THE WEST

When most people talk about water rights in the western United States, they focus on prior appropriation using phrases like "first in time is first in right" or "use it or lose it." Tribal water rights rarely enter the discussion except when in relation to the question: "Why do THEY, the tribes, have so much water?" Water rights based on state law and water rights for tribes based on federal common law use different terminology, or languages. The two types of water rights are based on different legal principles arising out of the necessity for water to provide productive land use. Misunderstandings and sometimes conflicts result from one side not knowing the other's language.

This short essay will illuminate this situation and provide an historical perspective on the legal principles and language used. The paper's second part provides a guide to a few key water terms frequently in the news related to the Colorado River, often incorrectly.

The essay begins at the beginning of Western water law, the origins of the prior appropriation doctrine and the federal reserved Indian water rights based on the W*inters* doctrine.

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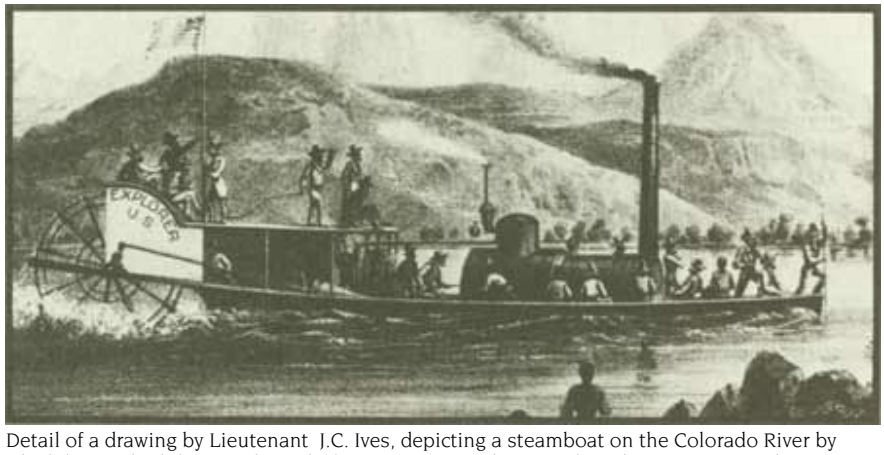
Prior appropriation doctrine

"Prior appropriation is a product of Euro-American settlement of the western United States over the latter half of the nineteenth century—a time period during which the federal government could not assert effective control over the use of the public domain."[1] This scholarly statement by water law Professors Dan Tarlock and Jason Robison may be summarized thusly: In the Wild West of the mid to late 1800s the settlers and miners took what they wanted, including land and water.



Detail of a drawing by Lieutenant J.C. Ives, depicting a steamboat on the Colorado River by which he reached the mouth of Black Canyon, 1858. The steamboat has approximately 21 men aboard, and is spewing smoke from the two thin, tall, smokestacks near the bow. The paddle wheel at the stern reads " EXPLORER US" and there is an American flag flying over it. Courtesy of the University of Southern California Libraries and the California Historical Society.

Most scholars, including Tarlock and Robison, trace the beginnings of the prior appropriation doctrine to an 1855 opinion from the California Supreme Court in the case of I*rwin v*. P*hillips*.[2] Let us start with a definition. Black's Law Dictionary defines the verb to appropriate as "[t]he exercise of control over property, [especially] without permission; a taking of possession."[3] A very apt term for the I*rwin v*. P*hillips*[4] case.

Mr. Irwin occupied public land for mining purposes. He constructed a dam and a diversion canal to take water from a stream and move it to his place of mining. Subsequent to Irwin's construction of the dam Mr. Phillips occupied land for mining purposes downstream. Mr. Phillips also needed water from the stream and proceeded to "trench the dam" claiming that under

1. Jason A. Robison & Antony Dan Tarlock, LAW OF WATER RIGHTS AND RESOURCES §5:2 at 248, (2020 ed) citations omitted.
2. 5 Cal.140, 1855 WL 691 (1855).
3. Black's Law Dictionary, (11th ed. 2019).
4. 5 Cal.140, 1855 WL 691 (1855).

the common law of the United States, which was based on riparianism, Mr. Irwin did not have the right to dam the stream shared in common with others.

Mr. Irwin sought a recourse that folklore indicates was not at all common in the Wild West at this time. He sued Mr. Phillips in California state court to prevent him from interfering with his prior right to divert water. Mr. Irwin prevailed in the lower court and Mr. Phillips appealed to the California Supreme Court. The California Supreme Court stated the issue:

> The proposition to be settled is whether the owner of a canal in the mineral region of this State, constructed for the purpose of supplying water to miners, has the right to divert the water of a stream from its natural channel, as against the claims of those who subsequent to the diversion take up lands along the banks of the stream, for the purpose of mining.[5]

The Court notes that both parties are occupiers of public lands either of the United States or of the new State of California without rights other than as provided to those in possession of the land. They both occupy the land for mining purposes. And it is the policy of the State of California to encourage mining on public lands as evidenced from its tax legislation among other laws.

Given this situation of no superior legal right, the Court stated that it is "bound to take notice of the political and social condition of the country, which [it] judicially rule[s]."

The Court determined that because both Mr. Irwin and Mr. Phillips were squatters, neither with a legal claim to the land, and both were using the water for the same laudable purpose of mining for gold, Mr. Irwin as the first to take control of the water had the superior right to its use and Mr. Phillips must use his land subject to the prior uses.

"[A] system has <u>been permitted</u> to grow up by the voluntary action and assent of the population…." This system protects the "rights of miners in the possession of their selected localities" and because mining requires a system of related uses including the taking of water from the natural stream therefore, "however much the policy of the State, as indicated by her legislation, has conferred the privilege to work the mines, it has equally conferred the right to divert the streams from their natural channels, and as these two rights stand upon an equal footing, when they conflict, they must be decided by the fact of priority upon the maxim of equity, *qui prior est in tempore potior est injure*."[6]

5. *Id*. at 145.
6. *Id*. at 146-7. H*e who is earlier in time is likely to be injured*.

Mining on the American River near Sacramento, c. 1852. Whole plate daguerreotype by George H. Johnson. Courtesy of the California Geological Survey.

In 1877 Congress codified this prior appropriation doctrine in the Desert Land Act that made all water on the public lands covered by the Act "free for the appropriation and use of the public."[7]

Subsequent state laws list the purposes for which water may be appropriated from the public domain, require posting notice or registering the use, and may require the application for a state permit to appropriate water.

The state of New Mexico included the prior appropriation doctrine in its original constitution. Article XVI titled Irrigation and Water Rights includes the following provisions:

> Section 1. Existing water rights confirmed.
> All existing rights to the use of any waters in this state for any useful or beneficial purpose are hereby recognized and confirmed.
>
> Sec. 2. Appropriation of water.
> The unappropriated water of every natural stream, perennial or torrential, within the state of New Mexico, is hereby declared to belong to the public and to be subject to appropriation for beneficial use, in accordance with the laws of the state. Priority of appropriation shall give the better right.

7. *Desert Land Act*, ch. 107, 19 Stat. 377 (1877) as cited in Robison & Tarlock at 251.

> Sec. 3. Beneficial use of water.
> Beneficial use shall be the basis, the measure and the limit of the right to the use of water.[8]

Water scarcity resulting from changing demands over the past century and shrinking supplies from climate change throughout much of the western United States cause many commentators to question the continued viability of the prior appropriation doctrine.

As we leave this section to move to the discussion of tribal water rights my nagging question is: If a permit issued by a state or federal governmental entity is required to take water from a stream, is the original term "*appropriator*" still appropriate given that the water use is now with the permission of the government?

Federal Indian Reserved Water Rights

In the late 1880s and early 1900s the United States implemented a policy of limiting the aboriginal lands indigenous people could use and establishing much smaller reservations. Some of the reservations are reserved from the aboriginal territory by treaty or agreement or a unilateral act of congress or an executive order. Some reservations were established hundreds or thousands of miles from the peoples' homeland. The indigenous people have always and continue to live in organized communities referred to as clans, bands, tribes and other names. The term tribes is used in this essay.

At the time of the relocation of hundreds of thousands of indigenous people living in the western United States to reservations were killed in what are now documented as genocidal policies and practices of both the state and federal governments of the United States.[9]

The land taken from the tribes by the United States became public lands and much of this land was opened for settlement or mining, including by Mr. Irwin and Mr. Phillips. This often left the indigenous population without a large enough land base, or one in an appropriate location, to continue their previous hunting and gathering way of life.[10] Reservations became places for

8. NEW MEXICO CONST. Art. 16 §3, adopted Jan. 21, 1911. Also see, G. Emlen Hall, *The First 100 Years of the New Mexico Water Code*, 48 Nat. Res. J. 245 (2008).

9. BENJAMIN MADLEY, An American Genocide, The United States and the California Indian Catastrophe, 1846-1873, The Lamar Series in Western History, Yale University Press, 2016.

10. The Indian Claims Commission was created by an act of Congress to address tribal claims against the United States that accrued before 1946. Pub.L. No. 79-726, 60 Stat. 1049 (codified at 28 U.S.C. §1505, 25 U.S.C. §70. The original time period for the ICC was ten years which was extended until

agriculture and the United States appropriated funds for the people to dig ditches and develop irrigation practices. This resulted in many people on reservations living without adequate food, subject to disease and exposure.[11]

The tribes needed water for irrigation on their reservations and the settlers needed water for irrigation on their new lands acquired from the United States. This conflict played out on the Milk River in Montana when the United States sued the settlers and irrigation companies including the named defendant, Mr. Winters, to regain and protect water for use on the Ft. Belknap reservation on behalf of the people of the Gros Ventre and Assiniboing[12] [*sic*] tribes.

The Court was asked to choose between competing federal policies—providing water for settlers who have rights to lands under the United States homestead and desert land laws[13] or providing water for the indigenous population relegated to the reservation from their broader homelands. The Court focused on the 1888 Treaty between the United States and the Gros Ventre and Assiniboine tribes.[14]

The treaty establishing the reservation states that "a tract of land was reserved and set apart 'as an Indian reservation as and for a permanent home and abiding place of the Gros Ventre and Assiniboine bands or tribes of Indians.'"[15]

Using rules of interpretation for agreements and treaties between the United States and Indians, the Court determined that the inference of the Indians' having given up all rights to the water or an inference that the water was retained for their benefit is an ambiguity that must be decided most favorably for the Indians.[16] Having decided that the United States reserved water to make the land productive as a homeland for the tribes the Court turned to the competing interests of the settlers.

The Court stated that "[t]he power of the government to reserve the waters and exempt them from appropriation under the state laws is not denied, and could not be." It is within the power of the United States to reserve water for the Indians on the reservation, and the Court determined

its termination in 1978. S*ee* COHEN'S HANDBOOK OF INDIAN LAW, §5.06[3] at page 438, (Nell Jessup Newton ed 2012) hereinafter, COHEN'S HANDBOOK.

11. Cohen's Handbook §1.05 at pages 79 – 81, reference "The Meriam Report," Institute for Government Research, The Problem of Indian Administration (Lewis Meriam ed., Johns Hopkins Press 1928).

12. The Court in W*inters* refers to the Assinigoing Tribe. The official spelling is Assiniboine which will be used in this paper.

13. Winters v. United States, 207 U.S. 564, 568 (1908)

14. I*d*. at 567

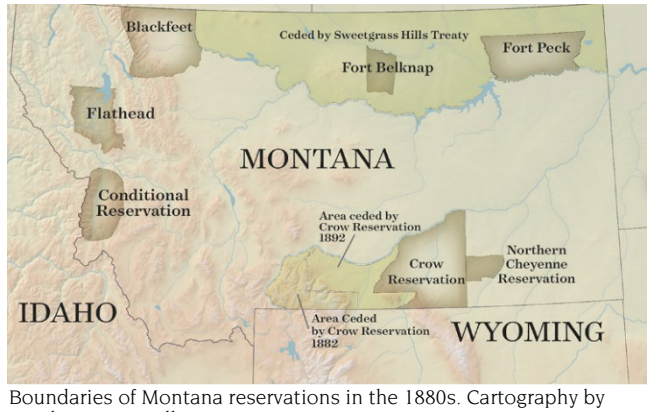
15. I*d*. at 565

16. I*d*. at 576

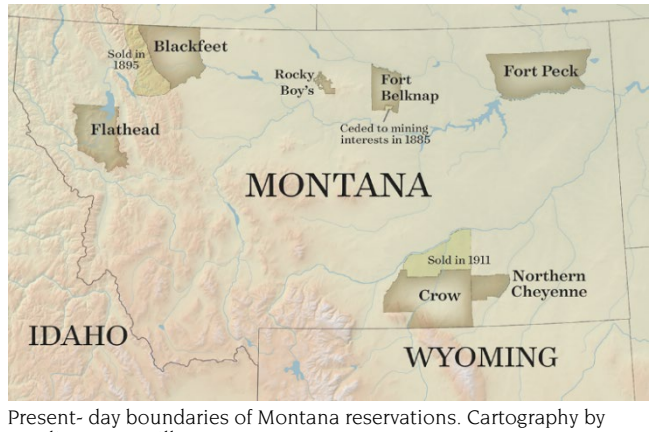
that the reservation of the land has to include water otherwise it would be extreme to have left the Indians with a barren waste.

The W*inters* principle is often referred to as an implied reservation of water that is sufficient to fulfill the purposes for which the reservation was established.[17] The conflict over water that ended in the Supreme Court in 1908 was between the settlers who claimed state law appropriative water rights to the Milk River and water for the reservation lands on the same River.

While the prior appropriation doctrine has been refined by state legislatures over the past 100 plus years, the scope and attributes of a federal reserved Indian water right have been defined and refined through court decisions. They remain common law principles not having been codified in federal law.[18]



Boundaries of Montana reservations in the 1880s. Cartography by Amelia Hagen-Dillon.



Present- day boundaries of Montana reservations. Cartography by Amelia Hagen-Dillon.

17. *See generally*, COHEN'S HANDBOOK §19.03, PAGES 1210 – 1220.

18. This author has not done research to determine if the doctrine is codified in tribal laws.

As indicated in the excerpts from the New Mexico constitution, the basis of the water right and the measure, or volume, of water appropriated under state law are determined by beneficial use. This is a measurable objective standard. Because a tribal reserved water right is for the present and the future use of the tribe, beneficial use cannot be the standard because it only looks backward to the extent of existing use and a reserved right must provide for the future.

The Court did not provide a methodology to quantify federal reserved water rights until approximately 55 years later in the case of A*rizona v. California*.[19]

The reservations established along the lower reaches of the Colorado River for the Mohave, Chemehuevi, Quechan and Cocopah people were reserved from a much larger aboriginal territories and were established for agricultural purposes. These tribes did not enter treaties with the United States but had their lands taken and the reservations established by statute and executive orders for the purpose of providing a tribal homeland supported by agriculture.

The Court established a quantification standard based on the quality and location of the land, referred to "Practicably Irrigable Acreage" or "PIA" quantification. The tribal water rights are for sufficient water to irrigate all the practicably irrigable acreage on the reservation. The irrigable acreage is determined by soil surveys and the practicable requirement is determined using agricultural market and water delivery economic analyses.

Since the 1963 decision in A*rizona v. California* state and federal water adjudication courts have examined the history and determined the purposes for which a reservation was established. The most common standard goes back to the W*inters* decision noting that the purpose for most reservations is to provide "a permanent home and abiding place" for the Indians.[20]

The tribal water rights are assigned a priority date that often corresponds to the date the reservation was established but may be as early as time immemorial for reservations or water uses that pre-date the reservation.[21]These priority dates are often the earliest on river systems because the reservations were established to move the indigenous population onto this land in order to open the balance of their lands for

19. Arizona v. California, 373 U.S. 546, 595-601 (1963).

20. I*n re* the General Adjudication of all Rights to Use Water in the Gila River System and Source, 201 Ariz. 307, 35 P. 3d 68, 76 (Az 2001).

21. A case addressing other reserved rights for tribes decided prior to the W*inters* case is U*nited States v.* W*inans*,191 U.S. 371 (1905). W*inans* addressed aboriginal rights reserved for hunting, fishing, and gathering within a tribe's aboriginal territory. W*inans* is sometimes referenced to support a priority date of time immemorial for lands that have always been part of a tribe's aboriginal territory.

settlement. Courts determining federal Indian reserved water rights and entering water decrees put the tribal water rights in the list of all water rights on a river in the order of their priority.[22] This maintains the principle relied on in I*rwin v. Phillips*: *qui prior est in tempore potior est injure*.

In summary, the origin of the doctrine of prior appropriation and the origin of the doctrine of federal reserved Indian water rights have commonalities. Both courts held that without water the actual or proposed use of the land would be useless. The courts also held that the furtherance of the public policy establishing the use of the land, such as for mining or an agricultural homeland, would be defeated without water. Both the prior appropriation and the W*inters* doctrines rely on priority to determine competing claims.

Part Two

The second part of this paper on water language discusses terminology used by the Court in the series of cases about the Colorado River collectively referred to as A*rizona v. California*. A short historical background is provided for terms referred to as the three A's plus E and C; apportionment, allocation, appropriation plus contracts and entitlements.

The Colorado River in the western United States and northwestern Mexico has been described as "the most legislated, most debated, and most litigated river in the entire world.[23] The "Law of the River" was described in 2007 as:

> [A] complex array of agreements, legislation, court decisions and decrees, contracts, and regulatory schedules relating to the Colorado River, including a treaty with Mexico, two major multistate agreements (or compacts), Supreme Court rulings, and myriad other federal and state laws, acts, and regulations.[24]

22. For tribes with reservation lands placed into trust status for their use more recently the priority date for those lands is most often the date of the reservation. This may result in multiple priority dates for the water rights for a tribe's reservation. An example is the Cocopah reservation which the Supreme Court in A*rizona v. Californi*a determined has priority dates for their federal Indian reserved water rights of 1917 and 1974. 547 U.S. 150, 157 (2006)

23. MARC REISNER, CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER, (Kindle edition published 2017) at 130.

24. COLORADO RIVER BASIN WATER MANAGEMENT, EVALUATING AND ADJUSTING TO HYDROCLIMATIC VARIABILITY, NATIONAL ACADEMIES PRESS (2007) at 36.

Since 2007 it has become more complex, requiring an understanding of the vocabulary to understand the legal structure.

The Three "A's"

The first of the "A's" is apportionment defined as a "[d]ivision into proportionate shares; [especially], the division of rights and liabilities among two or more persons or entities."[25] The shares do not have to be equal but a river apportionment is usually described as "equitable." The first case in the United States to address an equitable apportionment of a river is the 1907 case of *Kansas v. Colorado*.[26] The case was brought by the downstream state of Kansas against the upstream state of Colorado alleging that Colorado had deprived it of water from the Arkansas River.

The Arkansas River originates in the mountains of Colorado and snowmelt flows to the plains of Kansas. The Court acknowledged that each state has an equality of right to the water of the Arkansas River and that these rights require sharing the available water and applied equitable apportionment as the controlling legal principle to determine uses of a shared river among states of the United States.[27]

The factors examined to determine if the use by the state of Colorado interfered with an equitable apportionment for use in the state of Kansas are variable and depend on natural and societal values.[28] The Supreme Court under its original jurisdiction for disputes between the states[29] highlights the factors to be considered including the volume of water and the value of the water use in each state, but often leaves a final division of the water to negotiations among the parties.[30]

In the case of *Arizona v. California* the Court acknowledges that the 1922 Compact[31] apportioned the Colorado River between the upper and lower basin states and that Congress by stating volumes of water for the states of Nevada, Arizona, and California in the Boulder Canyon Project Act[32]

25. BLACK'S LAW DICTIONARY *supra note* 3.

26. 206 U.S. 46(1907).

27. The Court notes that this is not a case individual water rights but to determine how to share a river that runs between two states. 206 U.S. at 87.

28. 206 U.S. beginning at page 100.

29. U.S. CONST. art. II, §2, cl. 1.

30. Florida v. Georgia, 138 S. Ct. 2502, 2515 (2018) and cases cited in "Fourth" section.

31. ARS §45-1311 also available at https://www.usbr.gov/lc/region/pao/pdfiles/crcompct.pdf (accessed April 19, 2023).

32. 43 U.S.C. 617l.

apportioned the water among the lower basin states as 300,000 acre-feet for use in Nevada, 2.8 million acre-feet for use in Arizona, and 4.4 million acre-feet for use in California. No further apportionment was needed.

The second A is for allocation, which is defined as "[t]he amount or share of something that has been set aside or designated for a particular purpose."[33] An allocation is different from an apportionment among states or an appropriation. An allocation is most commonly a fixed volume of water for an entity or person to use.

The Supreme Court in A*rizona v. California* confirmed allocations of water to the states in the lower basin[34] based on the apportionment among the states as specified in the Boulder Canyon Project Act.[35] The Nevada and Arizona allocations are incorporated in contracts with the United States Bureau of Reclamation that include conditions and agreements regarding the use of the water. They specify that the contract is for the delivery of the water from the storage behind the Boulder Canyon Dam, now Hoover Dam.

The Court also allocated water to the five tribes in the lower basin based on the W*inters* doctrine. The states argued that the amount of water available for the tribes should be based on the doctrine of equitable apportionment instead of the W*inters* doctrine, but the Court rejected this argument simply stating that equitable apportionment applies only to states and tribes are not states.

The Court instead quantified the water for each reservation based on the amount of irrigable land on each reservation as a fair way to provide water for present and future homeland purposes. The evidence presented to the special master included maps of lands with soils capable of irrigated farming and economic analysis of crops that could be grown and used on the reservation or marketed. This evidence-based land use calculation of the water right was labeled Practicably Irrigable Acreage. Each reservation on the mainstream was allocated the lesser of a diversion amount determined by multiplying a water duty by the practicably irrigable acres or sufficient water for the consumptive use to irrigate the number of irrigable acres.

The tribal allocations are not included in contracts and are for diversion from the mainstream, not delivery from storage.

The final A of the three A's is appropriation, previously discussed in relation to Mr. Irwin and Mr. Phillips. On the Colorado River and other rivers in the West regulated by Reclamation projects, an appropriation may be converted to a contract right. For example, the 1928 Boulder Canyon Project Act (BCPA), [36] authorizing and appropriating money for the construction of a dam in Boulder Canyon, now Hoover Dam, federalizes all water in the Lower

33. Blacks Law Dictionary, 11th Ed. 2019.

34. AZ v. CA 373 U.S. 546, 590 – 1 (1963).

35. 43 USCA §617c.

36. 43 U.S.C. §617 et seq, P.L. 70-642 (1928).

Basin below Hoover Dam and requires those entities and individuals with appropriative rights to convert those rights to contract rights to continue diversion of the water.[37]

Section 5 of the BCPA states that "[n]o person shall have or be entitled to have the use for any purpose of the water stored as aforesaid (behind Boulder Canyon Dam) except by contract made as herein stated."[38] The contracts authorized by the BCPA protected the appropriators priority dates but required the state law appropriative rights to be traded for a contract with the federal government.

The "E" and the "C"

As states regulate appropriation of water often to the point of requiring a permit, these rights are often referred to as entitlements.

Going back to the dictionary, an entitlement is "[a]n absolute right to a (usually monetary) benefit, such as social security, granted immediately upon meeting a legal requirement."[39] Because of the usufructuary nature of a water right—it is available for use, but not generally for capture—an entitlement may be a more accurate term than appropriation which infers complete dominion over the property. A right to use water granted or confirmed in a contract is also referred to as an entitlement. It is valid only as long as the contract term and must be used in compliance with state law or the requirements in the contract.

An allocation is usually not an entitlement because it is not conditioned on contract terms or on meeting the legal requirements for access to the water or its use.

In summary of Part Two, an **apportionment** is an equitable division of a river between or among states that uses natural and societal factors to determine the amount of water for each state or to prevent interference in the use of the water in one state by uses in another state. An **allocation** is a legally defined share of a river or water source. An **appropriation** is the use of water for a beneficial purpose. An **entitlement** may be an appropriation under state law or a **contract** for use or delivery of water.

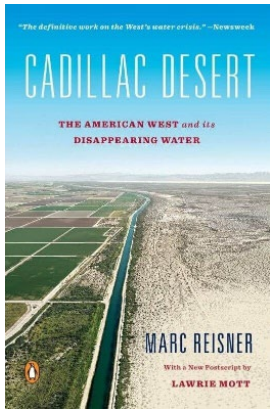
37. 43 U.S.C. §617d, P.L. 70-642 §5.

38. I*d*.

39. Blacks Law Dictionary, 11th Ed. 2019.

Conclusion

I hope you have enjoyed this foray into water language and the differences in the language describing the rights based on state law of prior appropriation and federal law based on the W*inters* doctrine. As we all continue to monitor the news reports about the Colorado River you may join me in cringing as this specific legal terminology is interchanged or confused.



Cadillac Desert: The American West and its Disappearing Water, Revised Edition, by Marc Reisner. PENGUIN BOOKS, 1993. 672 pp.; $20.00, *paperback*.

When Cadillac Desert appeared in 1987, the author, Marc Reisner, foretold a bleak future of diminishing water supplies, interstate conflicts, environmental crises, and institutional failure.

In his telling, the U. S. Bureau of Reclamation was the villain, responsible for creating a vast, ever expanding, unsustainable empire of dams, reservoirs, canals and irrigation projects that were destined to collapse in a future drought cycle.

That future has now arrived. The drought that Reisner foresaw has settled in and extended its grip across the West. This book is an instructive primer for understanding today's water conflicts. At 500 pages it is lengthy and deeply researched; its anecdotal style makes for an entertaining read and its chapters can be read out of sequence.

The story takes up in the 19th century as waves of homesteaders moved west, only to face widespread failure in arid desert expanses lacking sufficient rainfall for agriculture.

Without resources to dam and divert the rivers for large irrigation projects, settlers turned to the federal government for assistance. Congress responded in 1902 with a national rescue program led by a new agency—the Bureau of Reclamation.

The construction of Hoover Dam on the lower Colorado River at the onset of the Great Depression brought the Bureau national and international renown. The nation looked on as Bureau engineers directed construction of an architectural and engineering masterpiece, backing up a reservoir a hundred twenty miles long, delivering water to cities, and irrigating millions of acres of desert land.

In Reisner's words:

> The dam rose up and carried America's spirits with it… one could say that the age of great expectations was inaugurated at Hoover Dam—a fifty year flowering of hopes when all things appeared possible…

From this beginning the Bureau sent its engineers across the West taming rivers, moving water up over mountains and through miles of tunnels to complete grand projects: Shasta in California, Grand Coulee on the Columbia, Flaming Gorge in Utah, a string of dams on the upper Missouri, and hundreds of others throughout the West.

Each success generated still more demand and increased congressional funding. The Bureau began to lose its way, promoting grandiose designs such as diverting water from the Columbia River a thousand miles across Oregon and through the Nevada deserts to Lake Mead in Arizona. On the Missouri River the Bureau teamed up with the Army Corps of Engineers to build multiple dams that submerged hundreds of miles of wetlands and destroyed the homelands of the Mandan and Arikara tribes.

> What had begun as an emergency program to put the country back to work, to restore its sense of self-worth, to settle the refugees of the Dust Bowl, grew into a nature wrecking, money eating monster that our leaders lacked the courage or ability to stop.

Finally in the 1960s the emerging environmental movement began to challenge the Bureau and to tally up the damage. "Glen Canyon is gone. The Missouri bottomlands have disappeared. Nine out of ten acres of wetlands in California have vanished, and with them millions of migratory birds. The great salmon runs in the Columbia, the Sacramento, the San Joaquin, and dozens of tributaries are diminished or extinct."

The battle peaked when the agency revealed plans for two giant "cash register" dams, one at either end of the Grand Canyon, whose only purpose was generate hydropower revenue to build still more irrigation projects.

To counter public opposition, the Bureau explained that "tourists would better appreciate the beauties of the Grand Canyon from motorboats."

The Sierra Club responded with a national advertising campaign: "Should we also flood the Sistine Chapel so tourists can get nearer the ceiling?"

Then in 1977, President Carter sent Congress a budget that cancelled many pending projects throughout the West, prompting an insurrection from Western governors and members of Congress. After an acrimonious two year fight, the President backed down and accepted a compromise. But it was the beginning of the end. The Bureau never regained the initiative and the great age of dam building faded into history.

Today a chastened and restructured Bureau has moved beyond dam building with a new motto "Managing Water in the West." After a century of continually delivering more, the Bureau is now delivering less, struggling to keep reservoirs from shrinking to dead pool, and cutting deliveries to the irrigation districts and urban users.

Once again the Hoover Dam and the Colorado River are at the center of a growing conflict between and among Arizona, California, Nevada and the upper basin states of Colorado, New Mexico, Utah, and Wyoming. There is simply too much demand and too little water; the experts tell us that demand

in the river basin must soon be cut by at least 25% to avoid collapse of the system.

Reductions of this scale are creating extraordinarily challenging conflicts between agriculture, which uses 80% of available water, and growing urban and industrial users throughout the West. Inevitably some low value, marginal irrigated agriculture will have to be phased out to transfer water for use in developing urban areas.

Whether it can successfully manage and mediate these emerging allocation conflicts will determine the fate of the Bureau and the shape of Western society for the coming century.

Former Governor of Arizona Bruce Babbitt

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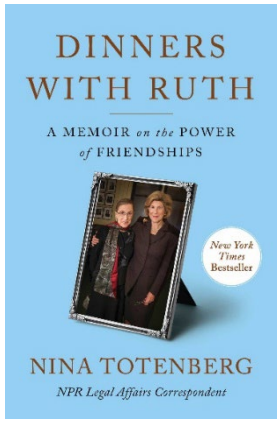


Dinners With Ruth: A Memoir on the Power of Friendships, by Nina Totenberg. SIMON & SCHUSTER, 2022. 320 pp.; $27.00, hardcover.

Movie buffs may associate the title of this reminiscence with the 1981 film, *My Dinner with Andre*, which takes place during a fictionalized dinner discussion between old friends comparing their different worlds. The book is authored by the noted Supreme Court correspondent for National Public Radio, Nina Totenberg, who lives in Washington D.C., a city noted for dinners, and who was a good friend of Supreme Court Justice Ruth Bader Ginsburg. One might think that the book is about the dinner conversations they had, which one imagines must have been fabulous. But it isn't about that. Instead, it is a book about friendships, and the struggles of the author and professional women she has known who were attempting to make their way professionally in a male dominated universe. Nina's friendship with Ruth plays an important role, and Ruth's contributions to society perhaps the most impactful, but the central theme is not about Ruth. It is about how women's friendships can carry them through the darkest of times.

Nina met Ruth during the 1970s, when many of us first got to know Ruth as a law professor and author extraordinaire. She not only wrote briefs to the Supreme Court, but she also wrote articles that articulated the reasons why, and the ways how, women should fight for equal rights. I called her the apex of the the dynamic women's movement of those times. Nina describes how she first met Ruth at a boring conference in New York and they escaped together to go shopping. I personally had long suspected Ruth did a lot of shopping because she was always elegantly dressed and never seemed to wear an outfit even similar to one I had seen before. This book confirms my suspicion.

When they first met, Ruth had become well known as an advocate and Nina was a struggling young reporter. Nina describes her thoughts after that first afternoon: "[W]hat I realized was that even though she was very accomplished, while I was younger and still had a lot to learn, we were similar in a very significant way. We were outsiders to the world in which we operated. We both had our noses pressed up against the windowpane, looking inside, and saying, 'Hey, men in there, let me in!'"

For lawyers, particularly women lawyers of a certain age, the descriptions of the difficulties Ruth Bader Ginsburg faced in the legal profession in the 1970s and 1980s are not new. But the struggles to get ahead on the part of the small band of women at NPR are enlightening. The heroines

here are Linda Wurtheimer and Cokie Roberts, who made it all sound easy on the radio, but who endured a work world pervaded with sexism. Nina describes the monthly lunches she, Linda, Cokie, and Lesley Stahl of CBS News had called the "Ladies Who Lunch," which was a needed escape from the male dominated newsrooms and workplaces where men would consistently talk over them. It was friendship that carried them through to remarkable successes. But in the beginning, Nina, Cokie, and Linda viewed themselves as an "unofficial" Human Relations department at NPR when it came to gender discrimination.

The men are not forgotten here. Ruth and Marty Ginsburg's devotion to each other was legendary in Washington. They gave many dinner parties and he was the chef. I have some of his recipes. His last illness, and Ruth's reluctance to leave his side, are poignantly described. We learn about Nina's marriage to her first husband and of his death. Indeed there is quite a bit of illness and death chronicled in this book, including the sad, way too early demise of Cokie Roberts. Nina's second husband is a doctor, and that may explain some of the vividness of the details.

Ruth's arrival at the Supreme Court signaled the beginning of the historically significant relationship between Ruth and the first woman Justice, Sandra Day O'Connor. Their friendship is described here by one who saw it first hand. It was important to both women, as I learned some years ago when I invited Ruth to come to Phoenix to do a lecture with Sandra. She came because, as she explained, she wanted to see Sandra and the Phoenix federal courthouse that is named for her. (She did tour the courthouse but, diplomatically, did not voice any audible reaction.)

Nina Totenberg studies the institution of the Supreme Court, and she describes institutional changes the two brought about. Ruth kept close touch with her law clerks, adopting the practice of sending notes of congratulations to her former clerks. Nina shares the little-known fact how much Ruth loved to perform weddings for her former clerks and friends, even meticulously planning and choreographing Nina's wedding to her second husband, David.[1] Ruth called Sandra "the most helpful big sister anyone could have" and the two supported each other on the Court. The day-to-day dismissal of the voices of smart women happened even within the walls of the Supreme Court, but the dynamics of the institution began to change when Sandra and Ruth were both part of the conversation.

The Ninth Circuit has always provided important and dramatic material for the Court, and this book features the Arizona case of *Safford Unified School District No. 1 v. Redding* 557 U.S. 364 (2009) as one in which the perceptions of men and women dramatically differed. The case involved public school officials strip-searching a thirteen-year-old girl, Savana Redding, to look for

1. Nina's first husband was Floyd Haskell, who served as a U.S. Senator from Colorado (1973-79) and passed away in 1994.

prescription strength ibuprofen on the basis of an uncorroborated tip. The Ninth Circuit, in an en banc opinion authored by Judge Wardlaw, concluded that the school officials violated Redding's Fourth Amendment rights to be free from unreasonable search and seizure; the search was not justified at its inception, and the school officials who directed and conducted the search were not entitled to qualified immunity. This was because the Fourth Amendment right of a thirteen-year-old girl to be free from strip searches on suspicion of possessing ibuprofen was clearly established. *Redding v. Safford Unified School District* No. 1, 531 F.3d 1071, 1087 (9th Cir. 2008) (en banc). Judge Wardlaw wrote: "The strip search of Savana was neither 'justified at its inception,' nor, as a grossly intrusive search of a middle school girl to locate pills with the potency of two over-the-counter Advil capsules, 'reasonably related in scope to the circumstances' giving rise to its initiation." *Id.* at 1074.

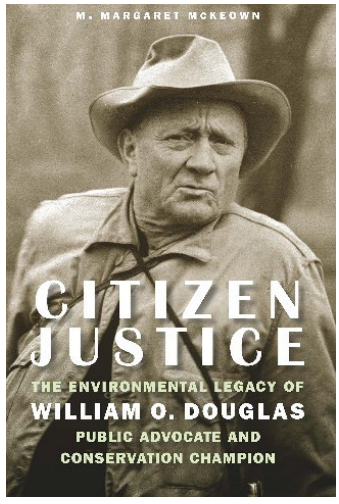
When the case got to the Supreme Court, the argument did not go well, with Justice Breyer having trouble seeing the case of the adolescent girl required to disrobe in the school office as any different from changing clothes for gym. The argument infuriated Ruth. With steam literally coming out her ears, she retorted: "You've never been a thirteen year-old girl." The Supreme Court, in an opinion written by Justice David Souter, held that Redding's search was unreasonable and violated the Fourth Amendment, but determined that the petitioners were protected from liability through qualified immunity. 557 U.S. at 378-79. Justice Ginsburg wrote separately, concurring in part and dissenting in part, that the law was "clearly established" and the school officials should not be entitled to qualified immunity. *Id.* at 381. Justice Ginsburg wrote: "[Assistant Principal] Wilson did not release Redding, to return to class or to go home, after the search. Instead, he made her sit on a chair outside his office for over two hours. At no point did he attempt to call her parent. Abuse of authority of that order should not be shielded by official immunity." *Id.* at 381-82. Ruth was never shy in expressing her views, especially concerning the treatment of women and girls.

What many may find surprising about Nina Totenberg is that she was not legally trained, although that probably goes a long way toward explaining her gift for translating legal arguments into relatable propositions. Her father was not a lawyer either, but was a world renowned violinist who played for many of the occasions, sad and glad, that are described in this book. In fact, his Stradivarius could win the prize as having the best supporting role in this memoir.

Indeed this book is about many kinds of talents, bordering on genius, that have run through Nina Totenberg's life, ranging from the musical to the medical and including the political and the jurisprudential. All are described with a reporter's gift of narrative style. It is a glimpse of history through Washington, D.C. eyes, but that Westerners will enjoy.

Hon. Mary M. Schroeder, Senior Judge, United States Court of Appeals for the Ninth Circuit

Editor's note: Judge Schroeder, who often dined with Justice Ginsberg, had one dinner with her I will not soon forget. At a Ninth Circuit Judicial Conference, I spotted the two of them seated together at an outdoor banquet. Taking the occasion to introduce an exchange student who was living with Phyllis and me at the time, I walked up and said: "Mary, I wanted to introduce Henriikka Larjoma from Finland to Justice Ginsberg." Before anyone could say another word, the Justice literally popped up from her seat and began speaking to Henriikka in Swedish. The Justice, it turned out, had been an exchange student in Sweden herself and knew that Finlanders spoke both languages. A special moment for a teenager far from home.



Citizen Justice: The Environmental Legacy of William O. Douglas, Public Advocate and Conservation Champion, by M. Margaret McKeown. POTOMAC BOOKS, 2022. 288 pp.; $29.95, *hardcover*.

The second of Douglas's three autobiographies is *Go East, Young Man*. Raised in Yakima, Washington, by a single mother, educated at Whitman College in Walla Walla, he did go East—to Columbia as a law student, to the Cravath firm (briefly and unhappily, twice), to Columbia as a faculty member (he resigned after a year), to Yale as a faculty member (for six years), to the Securities and Exchange Commission as a Commissioner (for three years), to poker games with President Franklin Roosevelt while on the SEC, and to the Supreme Court as an Associate Justice in 1939 at age forty. An ambitious and talented person with this record might have never looked back. But Douglas did look back—to the West he loved. In some ways, he never really left.

In the first of his autobiographies, *Of Men and Mountains*, Douglas wrote of boyhood hikes with his brother, Arthur, in the Wallowas and Cascades of the Pacific Northwest. He wrote that his legs had been weakened by polio when he was very young. He wrote that he pushed himself (and Arthur) in an effort to strengthen his legs, hiking faster and farther than most ordinary mortals. (The hiking part is true; the polio part is almost certainly not true.) He wrote lovingly of the western mountains, reciting the names of the lakes, peaks, and wildflowers. These early hikes were an harbinger.

The C&O Canal runs for 185 miles next to the Potomac River, from Washington, D.C., to Cumberland, Maryland. Never profitable, the canal was purchased by the federal government in 1938. President Roosevelt's Civilian Conservation Corps restored the towpath beside the canal, turning it into a public hiking path. In the 1940s, the Army Corps of Engineers proposed building flood-control reservoirs that would have destroyed much of the canal. The Park Service countered with a proposal to cover the canal and create a highway (euphemistically, a "parkway") along the Potomac. In 1954, the *Washington Post* wrote an editorial supporting the parkway.

Douglas loved the towpath. (Professor Charles Reich, author of *The Greening of America*, was Douglas's regular weekend hiking companion on the towpath from 1955 to 1960.) Predictably, Douglas hated the parkway proposal. Douglas wrote to the *Post*: "I wish the man who wrote your editorial of January 3, 1954, approving the parkway would take time off and come with me. We would go with packs on our backs and walk the 185 miles to Cumberland. I

feel that if your editor did, he would return a new man and use the power of your great editorial page to help keep this sanctuary untouched." The Post accepted the challenge.

Douglas, ever media-savvy, started the hike in Cumberland on a March Saturday, which meant that it would end the following Saturday in Washington, in time for coverage in the Sunday papers. On the first day, there were more than two dozen hikers. The group hiked fourteen miles on the first day, and twenty-three miles, through the snow, on the second day. On the second-to-last day, twenty-seven miles. (By then, most of the hikers had dropped out. They should have checked with Arthur.) On the last day, at Lock Five just outside Washington, Secretary of Interior Douglas McKay greeted the hikers, "Justice Douglas[,] I presume." The hikers boarded a barge pulled by two mules for the final five miles. In Georgetown, at the end of the canal, fifty thousand people cheered them home.

The hike was a triumph. At the end of the hike, the Post editorial writer, who had hiked some of the way, said, "After seeing [the canal], I think the parkway ought not go on the canal." The Post put it in writing a few days later.

Justice Brennan, who knew Douglas well, said that he was one of two true geniuses he had met in his life. (The other was Richard Posner, who had been a clerk to Justice Brennan.) Douglas was a genius, among other things, at publicity.

The hike along the canal was the first of many led by Douglas. Two were memorable and successful hikes in 1958 and 1964 along the beach on the Pacific coast of Washington State, east of the Olympic Mountains, to protest a highway that would have run right next to the beach. Another was a successful hike to protest a planned Army Corps of Engineers dam in the Red River Gorge in Kentucky. And there were still others.

Douglas hiked in plain view. But he also worked behind the scenes. To give but one example, he lobbied hard to stop the dam on the Gorge. He wrote to President Johnson to oppose the dam, asking one of Johnson's assistants to attach a note requesting Johnson's immediate attention. Johnson wrote back, promising to bring the matter to the attention of Secretary of Interior Stewart Udall. Not waiting for Johnson, Douglas had already sent Udall a copy of his letter to Johnson. Udall delayed the project, and the dam was never built.

Douglas was less successful in persuading his colleagues on the Court. He was a consistent dissenter in environmental cases. The most famous is his dissent in *Sierra Club v. Morton* in 1972, where the Court held that the Sierra Club did not have standing to object to the development of a ski resort in Mineral King Valley.

Some years before, Douglas had been a member on the Sierra Club board of directors. He had resigned from the board in 1961, but remained a life member with close ties to the club. The Sierra Club lost its appeal in *Morton* in the Ninth Circuit. It sought review in the Supreme Court in early November 1970. Douglas resigned his membership in early December 1970,

writing (almost certainly disingenuously) to the club president: "I do not want to be disqualified in cases which come before the Court. I am not thinking of any case in particular. I have not seen one here, nor have I heard of one which is on its way."

Relying on a law review article by Professor Christopher Stone, a draft of which had been sent privately to his chambers on the day of argument, Douglas famously argued in dissent that inanimate things such as trees and rivers should have standing in environmental cases. For better or worse, Douglas's (and Stone's) theory of standing has not prevailed.

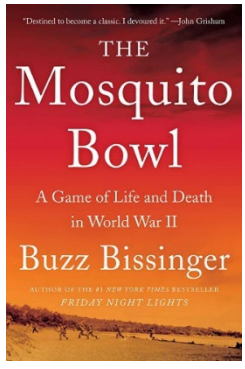
I thought I knew a lot about Justice Douglas. My mother had been his personal lawyer for many years. Douglas had invited me to his home in Washington, D.C., when I was a law student looking for a clerkship (not in his chambers). When I was a law clerk to Justice Brennan during October Term 1976, Douglas, by then retired from the Court and in a wheelchair, often invited me to join him for lunch. I had read many of Douglas's opinions and dissents. I had read all three of his autobiographies.

Judge McKeown's splendid book was a revelation. Douglas's personal life and life on the Court are in the background. In the foreground is Douglas's extraordinary extrajudicial work on behalf of the environment. Judge McKeown recounts, in fascinating detail, the hike on the C&O Canal, the lobbying campaign for the Red River Gorge, the crafting of the dissent in Morton, and much more. Judge McKeown paints a portrait of a gifted and indefatigable publicist, politician, and inside-the-beltway player. Parts of the portrait were already well known. How could it be otherwise, given that Douglas's stock-in-trade was public protests? But much of it, particularly the person-to-person lobbying, is brought to light for the first time here.

In Georgetown on May 17, 1977, the Park Service dedicated the C&O National Historic Park to Douglas. Eight Supreme Court Justices, a number of Senators and members of Congress, and others attended the ceremony beside the canal. A bust of Douglas was unveiled. Douglas was there in his wheelchair. I stood beside him. Now a lion in winter, more than twenty years after his 185-mile hike that had saved the canal, he had come full circle. I congratulated him for what he had accomplished. I did not know the half of it.

Hon. William A. Fletcher, Ninth Circuit Court of Appeals

The Mosquito Bowl: A *Game of Life & Death in* WWII, by Buzz Bissinger. HARPER COLLINS, 2022. 480 pp.; $32.50, *hardcover*.



> "I learned that war is not so bad,
> I learned about the great ones we have had,
> We fought in Germany and in France,
> And someday I might get my chance,
> And that's what I learned in school today,
> That's what I learned in school."[1]

In the years following World War II, the sons and daughters, wives and mothers, and aunts and uncles heard little about the actual fighting in Europe, the Pacific and elsewhere around the globe from those who had been in battle. For a myriad of reasons Veterans wanted to move on with their interrupted lives and put behind them the battle scenes which haunted them. My own father never talked about his service in the Army's 103rd Infantry Division. He lived through the Battle of the Bulge and the long cold winter of 1944-1945. He did talk about the liberation of a concentration camp near Landsberg, Germany and that the inhumanity and depravity he saw was incomprehensible.

Buzz Bissinger's book, *The Mosquito Bowl*, uses a football game played between two Marine regiments in Guam on December 24, 1944, as the backdrop for a stark description of the devastating toll in Marine lives lost in key battles in the South Pacific. This is a book that can be appreciated by those who know the human cost of war and should be read by those who do not.

Bissinger is best known for writing *Friday Night Lights*, which became a hit TV series. *The Mosquito Bowl* is not a thoroughly researched work like Andrew Roberts' biography of Churchill, nor does it go into detail about the strategy and missteps in the Pacific like Walter Borneman's *The Admirals*. It is however, hard to put down. Bissinger does credible work in building short histories for each of the Marines he highlights. This book will not shock you with its blood and gore like *We Are the Wounded* by Keith Wheeler, or *What It Is Like To Go To War* by Karl Marlantes. It does, however, leave the reader haunted by the memory of those lost like the poetry of Walt Whitman in "Drum-Taps."

Focusing on a small number of college football players who ended up in the Marine's Sixth Division, Bissinger gives a brief review of the life story of his chosen football stand outs, brief because the reader knows that not many of these young men will make it home alive. As it is, the familiarity you acquire

1. "What Did You Learn in School Today" written by Tom Paxton and recorded by Pete Seeger, 1963.

with each makes the truth of their casualties more difficult to accept. You want a different outcome, but war does not yield a result where every service member returns home.

John McLaughry graduated from Brown University in 1940. He was captain of the football team, a heavyweight boxing champ, and threw the hammer for the track team. Bissinger tells us that at the time McLaughry attended Brown, football teams in the East were much more competitive than they are today. What McLaughry was not, however, was an academic star. His grades would have made a bell curve canted toward the right axis, but only slightly. It could be said he enjoyed college life.

David Schreiner played football at the University of Wisconsin. As a junior he was named first-team All American in 1941. He played both offense and defense, and despite the fact that Wisconsin was not a top-rated team, Schreiner made a lasting impression on football coaches and NFL scouts. In a game against number-one-rated Ohio State in November, 1942, Schreiner played his best football ever and received glowing press reports. He applied to the Marine Corps Reserve Officer program at the end of that month.

Tony Butkovich grew up in central Illiniois. He played baseball and basketball. His small high school basketball team from Lewistown made it to the state quarter finals in 1940, on the playing success of Tony Butkovich. He enrolled at the University of Illinois to play football, however, not basketball.

George Murphy was the captain of the Notre Dame football team in 1942. Frank Leahy was in his second season as head coach. In a game between Wisconsin and Notre Dame on September 26, 1942 Murphy faced Schreiner. The game ended in a tie. Notre Dame had a winning record that season, including victories over Navy and Army.

Bob Bauman played high school football at Thornton Township High School, southwest of Chicago. Bob's senior year was 1938. He and his younger brother Frank both lettered in football, basketball and track. Bob played football at Wisconsin. Frank played at Illinois and then later at Purdue where he joined Butkovich. Both Bauman brothers were drafted by the Chicago Bears. Both became Marine officers.

The Navy ran an officer training program out of Purdue University. The program offered some modest deferment from active military duty and managed to give Purdue an edge in football. For most in the program, 1943 became their final season. Tony Butkovich had transferred to the Purdue team and before Purdue played Illinois, Tony found himself playing against his younger brother, Bill. In the game Tony ran twelve times for a total of 207 yards and scored four touchdowns.

These men were part of sixty-five Marines playing a game of football in the heat and humidity on Guadalcanal on Christmas Eve, 1944. Many of them had been stars at some of the biggest names in college football before the war started. The colleges they played for included Illinios, Wisconsin, Purdue, Notre Dame, and the University of California. There were five college team

captains, one two-time All American and one who had played a year for the NFL New York Giants.

The military draft brought most of these young men together. Bissinger provides some statistics surrounding the draft: 19 million drafted, 5 million received deferrments and another 4 million plus were found unfit physically. Deferments, however, became more difficult as the war waged on long after Pearl Harbor, unless you attended West Point or Annapolis. Is it a surprise then that West Point was undefeated and national football champion in 1944 and 1945?

As life continued forward at the service academies, the Marines of the Sixth Division continued to train for their entry into battle. Everyone who has served knows the tedium of training. The Marines were no exception. They feared the battle ahead, but wanted it to get started. It is a simple observation that the sooner the battle starts, the sooner it ends and you can go home.

They went from Bougainville to Saipan to Guam and back to Guadalcanal by September, 1944. After a number of smaller battles, by March 1945 the 6th Division was on its way to Okinawa. Okinawa is the southernmost of the Japanese islands and the Japanese intended to defend it literally to the death. The island had caves in which troops and artillery pieces could be concealed from over head observation. It had thick jungle which could hide a person standing mere meters away.

Historians have pointed out that interservice rivalry in the Pacific was abetted by the lack of a supreme commander. The Navy would not have General MacArthur and Admiral Nimitz was too junior to MacAruthur to assume leadership. The Army was despised by the Navy and the Marines view of the Army was even less cordial. Into this morass was thrown Simon Buckner, the son of a Confederate general in the Civil War. Buckner had been commanding Army troops in the Aleutian Islands off Alaska. He had never seen combat, when given command of the 10th Army in the Pacific. Bissinger provides enough of the detail to keep the reader interested without getting bogged down in the miscalculations, poor decisions, and lack of leadership in the battle to take Okinawa.

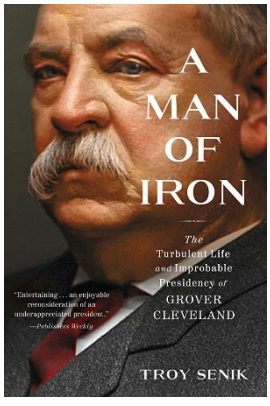
The battle for Okinawa lasted eighty-two days. The total number of killed or missing U.S. casualties was approximately 50,000. The Japanese casualties were between 60,000 and 100,000. The number of Okinawans killed was between 100,000 and 150,000.

As you turn the pages of this book you literally march step by step next to some of those who gave their young lives in an effort to defeat the Japanese army. For those readers unfamiliar with battle the circumstances are frightening and visceral. Some Marine lives ended in an instant, while other Marines' wounds went untreated for hours or days because the intensity of the battle precluded evacuation from the island or rough seas and shelling prevented transport to hospital ships.

The Mosquito Bowl is not an exegesis on the battle for Okinawa. It is not the definitive biography of those former college football players who fought

with the Marines in the South Pacific. Rather, it is an acknowledgment of the sacrifice this nation suffered in a series of battles from 1943 to 1945. Bissinger spends few pages at the end of the book talking about the survivors' lives after the war. Few pages, because while some live to return home, there are no true survivors of war.

Ed Novak, Esq., Government Investigations Chair, Polsinelli.
He was awarded the Silver Star Medal for bravery in combat in Vietnam.



A MAN OF IRON: *The Turbulent Life and Improbable Presidency of Grover Cleveland*, by Troy Senik. THRESHOLD EDITIONS, 2022. 384 pp.; $32.99, *hardcover*.

Our Most Underappreciated President?

Some may hope, others fear, that Donald Trump will be nominated as the Republican candidate for president for a third time in 2024. Were he to win his second presidential election, four years after having lost his re-election bid, it would be historic but not unique; it has happened once before. Grover Cleveland was first elected president in 1884, defeated for re-election by Benjamin Harrison in 1888 (despite winning the popular vote by a greater margin than in 1884), and elected again in 1892.[1]

Should Trump become the 47th president in addition to being the 45th, it will be one of the few similarities he shares with Cleveland.[2] Born in New Jersey, Cleveland came from a poor background (his father was an itinerant minister). He left school at the age of 16 to support his family after his father's death, and then bounced around for a few years, before eventually learning the law[3] and becoming a lawyer in his adopted hometown of Buffalo, New York.

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1. Cleveland is currently the only president to leave the White House and return for a second term four years later. Should Trump and Joe Biden meet again in the 2024 presidential election, it will be only the second time the same two candidates have competed for the office. The first time: Harrison-Cleveland in 1892. ALLAN NEVINS, GROVER CLEVELAND: A STUDY IN COURAGE 488 (1932).

2. Another comparison is that both presidents have a significant age gap between themselves and their respective First Ladies. Cleveland was nearly 28 years older than former First Lady Frances Folsom. *Frances Folsom Cleveland*, THE WHITE HOUSE, https://www.whitehouse.gov/about-the-white-house/first-families/frances-folsom-cleveland (last accessed Nov. 3, 2022). By comparison, Trump is 24 years older than former First Lady Melania Trump. *Melania Trump*, THE WHITE HOUSE, https://www.whitehouse.gov/about-the-white-house/first-families/melania-trump (last accessed Nov. 3, 2022).

3. "Learning the law" became a catchphrase for doing an apprenticeship in a law office. Abraham Lincoln is easily the most famous for having learned the law in that way. Robert Jackson was the last Supreme Court Justice not to have earned a law degree (as a young man he did not have the benefit of a

Cleveland was an extremely conscientious, detail-oriented person with a well-earned reputation as an incredibly hard worker; a typical workday went from 8 a.m. to 2 a.m. He was disciplined and focused, except for his weight; he was one of the most obese men ever to be President (topping out around 275 pounds). His work ethic and personal integrity were legendary. He was, at bottom, a serious and to some boring man; a dedicated workaholic whose most significant political belief throughout his life was that a politician should be an honest administrator—a fiduciary for the people his political position was supposed to serve. In short, he was a thoroughly different person than Trump, even if there is a chance they might share an historical oddity.

As this well written and researched biography points out, Cleveland almost certainly gets less respect than his record deserves. He stuck to his principles even when it was politically fatal. He was initially recruited as a political candidate because of those qualities, and to the undoubted surprise of those who recruited and supported him, he held to his beliefs even to the point of refusing to reward his supporters when he did not think it appropriate. He saw his duty as an honest broker for those who had elected him as paramount, even to the point of refusing to be politically pragmatic when that might have accomplished much of what he thought was the "right" result.

Cleveland was stubborn and never a very good politician, either in election cycles or when dealing with Congress or his party. This rigidity probably cost him re-election after his first term, but it is a testament both to his consistency and his reputation that the Democrats turned back to Cleveland after losing the presidency in 1888, and he won it back for them in 1892.[4]

There have been several presidents without prior political experience. Most of them have been military heroes—Andrew Jackson, Ulysses S. Grant, Dwight Eisenhower. Herbert Hoover served as Secretary of Commerce under Warren Harding and Calvin Coolidge but had never held elected office until he won the presidential election of 1928. And of course, we all remember

college degree, but he did attend Albany Law School, which granted him a certificate in 1912). Eugene C. Gerhart, *The Legacy of Robert* H. *Jackson*, 68 ALBANY L. REV. 19, 19–22 (2005); *see also* Gregory G. Garre, *On Lawyers and Leadership in Government*: *Lessons from "America's Advocate," Robert* H. *Jackson*, 69 STAN. L. REV. 1795, 1796 (2017).

4. Cleveland was no more flexible in his second term than his first, and the result was the biggest loss for a majority party in mid-term elections ever seen in America: Democrats lost 125 seats in the House and the majority in the Senate. ANDREW E. BUSCH, HORSES IN MIDSTREAM: U.S. MIDTERM ELECTIONS AND THEIR CONSEQUENCES 63–71 (1999). It would be eighteen years before Democrats again gained control of both houses of Congress. JAMES E. CAMPBELL, THE PRESIDENTIAL PULSE OF CONGRESSIONAL ELECTIONS 8 (2014).

Trump riding down the escalator to announce his first attempt at elective office at any level. Cleveland had more political officeholding experience than this list, but just barely.

Elected as sheriff of Erie County, New York in 1870 at the age of 33, he served one term. He had no further political experience until 1881, when he was drafted to be the Democratic candidate for Mayor of Buffalo. The Buffalo municipal government was notoriously corrupt, regardless of the party in charge. In 1881, the Democrats saw an opportunity to win by nominating someone with an unquestioned reputation for honesty and integrity. Seventeen days before the election (oh, how the world has changed!), they settled on Cleveland, a successful lawyer with exactly the reputation they wanted. Cleveland won easily and took office on January 2, 1882.

His inaugural message to the Buffalo City Council was so starkly anti-graft and reformist (according to Senik, Cleveland made clear "he had come to City Hall to break furniture") that it drew a motion halfway through its reading to prevent the clerk from finishing it. He proceeded to govern exactly the way he said he would, and when the leading candidates for the 1882 Democratic nomination for New York Governor deadlocked, Buffalo Mayor Cleveland became the compromise nominee. He easily defeated the Republican nominee, and promptly began carrying out his promise of being an honest fiduciary for the people by issuing a record number of vetoes—eight in just his first two months in office—earning him the strong opposition of Tammany Hall, the corrupt but powerful Democratic machine in New York City.

Just two years later, Cleveland became the Democratic nominee for President of the United States. He won but just barely; taking the popular vote by about one half of one percent; a switch of less than 2,500 votes in New York and Connecticut would have handed victory to James G. Blaine. On March 4, 1885, Cleveland was sworn in as the 22nd president, the second youngest president in American history at age 48, and perhaps more significantly, the first Democrat elected to the presidency between the Civil War and the election of Woodrow Wilson in 1912.[5]

Less than four years had passed since a relatively unknown lawyer had been asked if he would be willing to be a candidate for Mayor of Buffalo and

5. Interestingly, Cleveland and Wilson were neighbors in Princeton, New Jersey after Cleveland's first term and before Wilson was a professor and later President of the University. Cleveland had chosen the college town as his retirement home, eventually taking a seat on Princeton's Board of Trustees. The pair were the only Democrats elected president between Lincoln and Franklin D. Roosevelt. Wilson once wrote to Cleveland that: "It has been one of the best circumstances of my life that I have been closely associated with you in matters both large and small." NEVINS, *supra* note, 1 at 763 (citing Mar. 5, 1905, Cleveland Papers).

now he was President of the United States, certainly one of the most surprising and meteoric political journeys in American history. As president, Cleveland continued to use the veto more than political persuasion; imagine the polar opposite of Lyndon Johnson in terms of relations with Congress. He was conservative and legally fastidious; if he did not believe an expenditure was sound and constitutional, he would not approve it. He brought these same traits to his foreign policy, resisting strong campaigns to build the first iteration of the eventual Panama Canal and for annexation of the Hawaiian Islands. He rescinded his predecessor's order opening millions of acres of Indian land in the Dakota Territory to white settlement. All of these decisions were driven by his belief that he had been empowered to do the right thing, the moral thing, and not simply to advance the interests of one or more groups of Americans. In his second term, he resisted calls to help Cuban revolutionaries and avoided war with Spain, although that came quickly enough after his departure from the White House.

Cleveland was not the first unmarried president but in 1886 he became the first, and so far only, to be married in the White House. His spouse was the 21-year-old daughter of his deceased best friend, Frances Folsom, and she became the youngest first lady in American history.[6] For the rest of his time in office, his attractive and vivacious wife would be much more popular than the President (certainly the most popular First Lady until Jacqueline Kennedy), and they remained together until his death in 1908 at the age of 71.[7]

Cleveland was one of only three presidents to win the popular vote three times, and one of only fourteen to serve two full terms. Contemporaries like Mark Twain, an admirer of Grant, thought Cleveland "a very great president [who] not only properly appreciated the dignity of his office but added to its dignity."[8] Successor presidents like William Howard Taft and Woodrow Wilson also thought him a great president, with Wilson saying he was "the sort of president the makers of the Constitution had vaguely in mind . . . ."[9] Indeed, Wilson observed: "His courses of action were incalculable to the mere politician, simply because they were not based on calculation." Despite these

6. *See generally* ANNETTE B. DUNLAP, FRANK: THE STORY OF FRANCES FOLSOM CLEVELAND, AMERICA'S YOUNGEST FIRST LADY (2015).

7. Mrs. Cleveland was a favorite of the White House staff. On the day the Clevelands left for the incoming Harrison administration, she approached the head usher and whispered in his ear to not move the furniture around as she and the President would be back in four years.

8. MARK TWAIN, AUTOBIOGRAPHY OF MARK TWAIN, VOLUME 3: THE COMPLETE AND AUTHORITATIVE EDITION 238 (2015); *see also* RON CHERNOW, GRANT 938–40 (discussing Twain's close relationship with Grant).

9. Woodrow Wilson, *Mr. Cleveland as President*, THE ATLANTIC (Mar. 1897).

contemporary perceptions, Cleveland has largely faded from public memory, remembered if at all as a generally "do nothing" president.

Senik persuasively argues that this is "a fundamental misunderstanding of his presidency," calling him a "reactive activist," noting that in just his first term he issued more vetoes (414) than his 21 predecessors combined. In his two terms, he issued 584 vetoes, trailing only Franklin D. Roosevelt (who took twelve years to get to 635). He was opposed to corruption and willing to follow principle regardless of politics; Senik notes his "his conception of the role of the federal government—and, for that matter, the presidency—seems so antiquated as to be unrecognizable to the average American."

This may be true, and certainly the presidency today is a very different office than it was 140 years ago. Perhaps it is simply not realistic to imagine a Cleveland-type presidency in these very different times. Still, given today's caustic and frequently completely ineffective politics, one may be forgiven for hoping to see even a pale imitation of Grover Cleveland in the Oval Office at some point in the future.

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