Bargaining for Tribal Water in California

Leslie Sanchez and Eric C. Edwards

Stark power disparities between Native American tribes (tribes) and nontribal entities in California have shaped tribes' legal standing to assert water rights claims, bargaining power in resolving claims, and the ability to assert meaningful control over water rights. This article documents the current status of tribal water rights in California and explains why they differ from other states.

In the semi-arid western United States, a system of property rights allocates water among alternative uses. Every western state follows a set of rules that grant priority based on the first year a user diverted surface water for productive use. This doctrine of prior appropriation remains relatively stable because new water rights must queue behind earlier claimants. The priority dates on many senior water rights precede the turn of the 20th century.

The most dramatic change to this ordering over the last 60 years has been the recognition of water rights held by tribes on federal Indian reservations. Court orders and, more recently, settlement agreements have reshaped the structure of allocations among California's neighboring states: Arizona, Nevada, and Oregon. The Colorado River, the lifeblood of seven states, northern Mexico, and 30 reservations, has seen dramatic changes to its water rights system. Today, Native American tribes own rights to 22% to 26% of the river's average annual flows. Given the inflexibility of the appropriative rights system, these tribes have become crucial partners in managing regional water shortfalls. Relative to other western states, settled tribal water rights claims in California have been substantially smaller and have had less impact on the state's overall water allocation system.

Origins of Tribal Water Rights

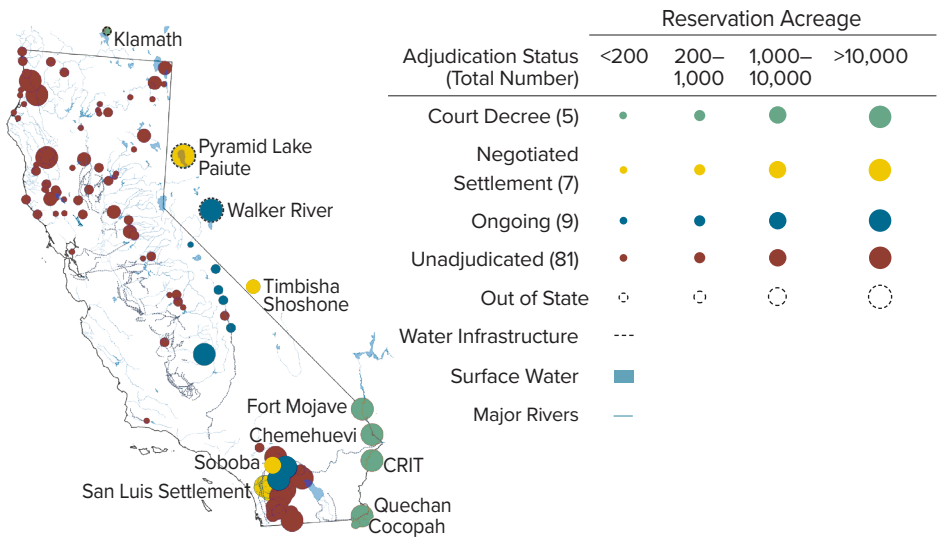
When Native American tribes ceded millions of acres of their aboriginal homelands to the United States through reservation treaties with the federal government, they were promised protection to ensure the survival and well-being of their reservations. Most treaties neglected to mention, and did not quantify, the water rights necessary to do this. Still, these treaties and the ensuing U.S. trust obligations to tribes form the legal basis for contemporary tribal water claims.

In 1908, the U.S. Supreme Court affirmed in *Winters v. U.S.* that through the creation of reservations, tribes are entitled to water rights sufficient to meet their homeland needs. These Winters rights have a priority date of when the reservation was established and are therefore senior to most appropriative rights. The Winters decision, however, did not quantify or create water rights for tribes. As a result, surface water resources in western states were fully appropriated for off-reservation use without regard for tribal water needs or prior uses. To obtain legally enforceable water rights, tribes must quantify their rights via an extensive legal process, resulting in either a court decree, or more commonly in the last 40 years, an adjudicated settlement.

To begin the settlement process, a tribe and the federal government assert claims in court based on the tribes' homeland needs. Water rights allocations are then negotiated with adjacent water users. Settlements often involve reallocating water from existing users, whose remaining rights are made junior to the newly created Winters rights. To date, 58 of 226 reservations across the 11 westernmost contiguous states have adjudicated rights to 10.5 million acre-feet (MAF) of water, while 23 with ongoing adjudications have claims totaling nearly 1.3 MAF. One acre-foot is equal to 325,851 gallons, which is enough to support two to three households for one year.

Tribal water adjudications in California have followed a different

Figure 1. Winters Adjudication Status



Source: Authors' calculations from data adapted from Sanchez et al. 2020.

path. The state is home to 109 Tribal Nations residing on 102 federally recognized reservations. Of these, only 12 have secured rights to 0.2 MAF of water. Figure 1 shows the Winters adjudication status of 102 federally recognized reservations and rancherías in California, with markers corresponding to acreage.

Land and Water Rights in California

The current obstacles to tribal water rights in California are rooted in the state's relatively early colonization and its aggressive land dispossession tactics, which ultimately diminished tribes' Winters claims. The United States acquired California from Mexico in 1848 at the start of the Gold Rush and granted it statehood in 1851. The California Land Act of 1851 extinguished tribes' existing land rights claims and entered tribal land into the public domain to be sold to U.S. interests. Also in 1851, the federal government signed 18 reservation treaties that would have entitled 119 California tribes to 7.5 million acres of land across the state. But under pressure from nontribal interests who were reluctant to cede potential mining rights and high-quality farmland to tribes, the U.S. Senate neglected to ratify the treaties. Without treaty rights, California's tribes had no legal recourse against nontribal interests encroaching on their land.

The federal government sought to quell ongoing conflicts by creating reservations through executive orders and the ranchería system, where it purchased land for "homeless Indians." Both strategies resulted in significantly smaller homelands than in other states, as executive orders were rescinded and altered to diminish tribal land bases. Rancherías were individual tracts of land separate from land allocated to a specific tribe. This made it difficult to maintain sovereign-to-sovereign relations with the U.S. government, and in the 1950s, 41 rancherías lost federal recognition, also losing the legal standing to claim Winters rights.

Table 1. Average (Mean) Reservation Characteristics

	U.S. West	California	Difference
Reservation Acres	427,016	6,465	-420,551***
Population (2010)	5,489	643	-4,846***
Population Per Acre	0.29	0.44	0.16
Practicably Irrigable Acres	195,488	4,810	-190,678***
Annual Water Entitlement (Acre-Feet)	228,324	21,859	-206,465**
Annual Water Entitlement (Acre-Feet/Acre)	7.87	1.15	-6.72
Reservations With Adjudicated Rights (%)	40.80	12.26	-28.54
Duration of Negotiations (Years)	23.31	47.33	24.03***
Observations	124	102	226

Source: Adapted from Sanchez et al. 2020.
Note: Difference statistical significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Bargaining for Water

Diminishing tribes' land rights effectively reduced future Winters claims and skewed bargaining power in later settlement negotiations in favor of nontribal interests. This is partly due to a 1963 Supreme Court ruling, *Arizona v. California*, that tied tribal water claims to reservation acreage. The ruling established a reservation's practicably irrigable acreage (PIA) as the volume of water to which tribes were entitled to support their homeland needs. Hence, larger reservations with more arable farmland have stronger water rights claims and have secured larger water entitlements than smaller reservations with less arable land. Table 1 compares the characteristics of reservations in California to those in the other 10 westernmost states. California tribes, with significantly smaller land bases, have received significantly smaller total and per-acre water entitlements.

The magnitude of Winters claims also influences tribes' decisions to pursue adjudication in the first place, as they weigh the potential benefits against the costs. Benefits are increasing with water scarcity (as tribes seek legal mechanisms to enforce water deliveries) and with reservation acreage (which correlates with higher entitlement volumes). Yet, settling claims to already scarce water is costly. Tribes in California have small land holdings, entitling them to less total water, and their negotiations take 24 years longer to resolve, on average, than negotiations in other western states. The small benefit-to-cost ratio this implies likely explains why only 12% of reservations in California have secured their water rights, compared to 41% in other states.

Relatively small claims put tribes at a disadvantage during the adjudication process, as large nontribal entities with substantially more resources can absorb the costs of delaying a settlement that would curtail their water use. In Southern California, almost every tribe must contend with powerful municipal water interests like Metropolitan Water District (MWD) and cities like Los Angeles and San Diego. For instance, MWD and the San Diego County Water Authority were parties to the 1988 San Luis Rey Settlement that provided five reservations outside of San Diego rights to 16,000 acre-feet of water per year (AFY). Reservations like the Bishop Paiute, Big Pine, and Lone Pine have ongoing adjudications to Owens River water rights held by

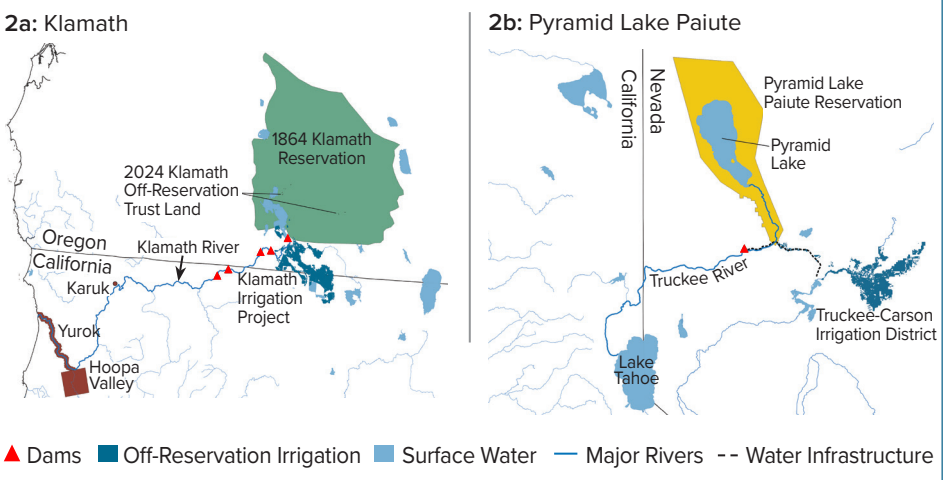
Los Angeles. Nearby, the Timbisha Shoshone were repeatedly displaced from their homelands in the Mojave Desert. In 2000, they finally received reservation land in California and Nevada through legislation that also provided 500 AFY of groundwater rights. The marginalization of these tribes and their water claims enabled Los Angeles to assert control over the entirety of the water resources in the Owens Valley.

The Soboba Indian Reservation, located in the San Jacinto Mountains east of Los Angeles and whose adjudication spanned 58 years, exemplifies how power imbalances shape the settlement process. When the reservation was established in 1883, the Soboba Indian Reservation relied on the San Jacinto River for irrigation. Diversions by upstream settlers dried the river and forced a shift to groundwater. In 1933, MWD began construction of the San Jacinto tunnel—part of the Colorado River Aqueduct—which diverted Colorado River water under the reservation to Los Angeles. The tunnel drained the Tribe's groundwater, and most economic activity on the reservation ceased.

In 1950, the Tribe filed an Indian Claims Commission (ICC) suit against the federal government for failing to protect its water rights. The ICC ruled against the government in 1976, eventually leading to negotiations to settle the Soboba Indian Reservations's claims, which commenced in 1995. In 2008, a settlement granted the Tribe 9,000 AFY of water rights and $21 million to develop them.

The Soboba case shows how tribes bear the costs of water insecurity during protracted negotiations, while entities like MWD have the motivation and resources to delay settlement. The benefit-to-cost ratio of the Soboba settlement—9,000 AFY for 58 years of negotiations—is low relative to settlements in other states; the ratio is even lower for other California tribes. At 8,000 acres, the Soboba Indian Reservation is larger, and also older, than other reservations in California. Thus, their entitlement is likely in the upper range in volume and priority for what California tribes might hope to secure. Conversely, rancherías established in the mid-1900s have smaller, relatively junior claims that are ultimately less secure. The Soboba's well-documented history of water use provided evidence to support its Winters claims, which ultimately brought MWD to the negotiating table. Smaller, later-established reservations incur higher bargaining costs when they lack historical documentation to support their claims.

Figure 2. Klamath and Pyramid Lake Paiute Tribes' Winters Adjudication Map



Source: Authors' drawings using data from Sanchez et. al. 2020, the Oregon Water Resources Department, and the Nevada Department of Water Resources.

Implementation Challenges and Opportunities

Despite the limited scope of tribal water settlements to date in California, Winters rights in neighboring states play a significant role in California water allocations. The Klamath Tribes in Oregon, the Pyramid Lake Paiute Tribe (PLPT) in Nevada, and five reservations along the California-Arizona border hold high-priority Winters rights to surface water crossing the California state line. In each case, the sovereignty tribes were able to exert over their rights increased when tribal priorities aligned with state or federal interests.

Water development around the Klamath and PLPT reservations followed similar paths: Both were established by treaty in the mid-1800s, saw tribal fisheries depleted by off-reservation irrigation projects in the early 1900s, and sued for instream flow rights in the mid-1900s. Although the Klamath Tribes lost federal recognition in 1954, their 1864 reservation treaty ensured fishing rights in perpetuity, entitling the Tribes to Winters rights.

The PLPT received rights to 520,000 AFY through the 1990 Pyramid Lake Water Settlement Act, while the Klamath Tribes secured approximately 100,635 AFY in the 2013 Klamath Basin Adjudication. Both Tribes benefited from laws like the Endangered Species Act (ESA) and Clean Water Act (CWA) as they negotiated with adjacent water users to exercise their instream flow rights.

Figure 2a shows the Winters adjudication map for the Klamath River, which flows from Oregon into California. The Klamath Tribes sought legally enforceable water rights for streamflow and the removal of hydroelectric dams along the Klamath River to restore connectivity for endangered fish. The ESA and CWA raised the costs of dam reauthorization by the Federal Energy Regulatory

Commission, as dam owners now had to ensure that dams did not degrade endangered salmon habitat. The Klamath Tribes, along with downstream Yurok and Karuk Tribes, negotiated the removal of dams blocking streamflow, so their Winters rights remain instream for the length of the river.

Figure 2b depicts the Winters adjudication map for the Pyramid Lake Paiute Tribe. The PLPT sought restoration of Truckee River flows, which originate at Lake Tahoe in California, for the threatened Lahontan cutthroat trout and the endangered Cui-ui, which is endemic to Pyramid Lake. Along the Truckee River, the ESA and CWA incentivized cooperation between the PLPT and off-reservation water users, encouraging out-of-court agreements to meet environmental requirements. Federal funding supported the purchase of water rights from irrigation districts to restore streamflow. By 2016, 11,200 acre-feet (AF) had been purchased at an average cost of $5,000 per acre-foot.

In Southern California, five tribes hold Winters rights to significant flows from the Colorado River. The Colorado River Indian Reservation (CRIT) has the senior-most rights to 719,846 AF of Colorado River water. The entire state of California holds a separate right to 4.4 MAF. Historically, CRIT has used 95% of its entitlement, primarily for irrigated agriculture. Capital constraints limit higher-value, higher-efficiency uses. Downstream California water users benefit from such inefficiencies, as they can use CRIT's return flows for free. Arizona, located upstream from CRIT, does not benefit from the free use of return flows. Likewise, as the junior-most appropriator on the river, Arizona's rights are vulnerable during shortages. This has caused the interests of Arizona and California to diverge in their views of the strong legal claims exerted by CRIT.

In 2019, CRIT signed a forbearance agreement with Arizona. CRIT received $38 million in exchange for banking 150,000 AF in Lake Mead. In return, Arizona staved off mandatory curtailments associated with declining lake levels. In 2023, congress, with Arizona's support, passed formal legislation authorizing CRIT to lease water off-reservation in Arizona. These market mechanisms can enhance drought adaptation while also providing CRIT with much-needed leasing revenue. California, however, has little incentive to support similar legislation that would let CRIT market water in the state, as this could force California water users to pay for CRIT return flows that they currently use without compensation.

Implications for Groundwater

In 2017, the Ninth Circuit Court of Appeals ruled in *Agua Caliente v. Coachella Valley Water District* that the Winters doctrine applies to groundwater rights. The ruling comes at a time when the California Sustainable Groundwater Management Act (SGMA) requires groundwater users across the state to draft and implement plans for sustainable groundwater use by 2040. Meeting sustainability requirements implicitly requires an accounting for past use and limits on future withdrawals, which may ultimately lead to adjudications. These adjudications provide a clear opportunity for the resolution of tribal groundwater claims under *Winters*.

Limited legal precedent for integrating Winters claims to groundwater into state water rights suggests that tribes will have an opportunity to influence the legal framework. Despite uncertainties about how Winters rights will be administered in the context of existing state groundwater law, the history of tribes' surface water rights in California offers potential lessons. In surface water adjudications, retroactively reallocating rights from powerful off-reservation interests has proven difficult but can ultimately inject elements of flexibility and collaboration into state water governance. As SGMA unfolds, proactive incorporation of tribal claims could include tribal needs in groundwater governance in ways that were not possible for surface water.

Suggested Citation:
Sanchez, Leslie and Eric C. Edwards. 2025. "Bargaining for Tribal Water in California." *ARE Update* 28(4): 12–15. University of California Giannini Foundation of Agricultural Economics.

Authors' Bios

Leslie Sanchez is a postdoctoral scholar, and Eric C. Edwards is an associate professor, both in the Department of Agricultural and Resource Economics, UC Davis. They can be reached at lcsanch@ucdavis.edu and ecedwar@ucdavis.edu, respectively.

For additional information, the authors recommend:

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