

**PROTECTION AND IMPLEMENTATION OF INDIAN
RESERVED WATER RIGHTS AS A NECESSARY
CONDITION FOR TRIBAL ECONOMIC DEVELOPMENT**

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INTRODUCTION

This Essay discusses the legal principles of Indian reserved water rights as determined by the courts and the history of how those rights have been enforced and implemented by tribes and the United States—Congress and the federal executive—which holds title to these rights in

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trust for the tribes. The Restatement Chapter on Indian Water Rights sets out these basic legal principles, which seem now well-established with commendable clarity.

Parts I and II of this Essay discuss the legal framework of Indian water rights as developed by the courts over the past century, concluding that for over a century, the courts have enunciated with noteworthy consistency the basic legal principles of Indian reserved water rights. But as discussed in Section I.B, Congress and the executive branch nonetheless essentially neglected and ignored these principles for the first half of the twentieth century, instead funding and fostering development of water projects for non-Indians often in derogation of the superior legal rights of tribes. This contributed to the impoverishment of Indian tribes in those years, with adverse effects that continue today.

As discussed in Part III, in contrast to its serious failures during the first half of the twentieth century to protect and enforce Indian water rights, in more recent decades the federal government, joined (and in many cases pressured) by tribes themselves, has begun more actively to advocate and enforce Indian water rights—chiefly in litigation against states and non-Indian water users and in negotiated settlements of that litigation. Because courts cannot direct the United States, states, or private parties to fund the costly infrastructure that is usually necessary to deliver water to which tribes are legally entitled, the enforcement and implementation of tribes' federally protected legal water rights typically require and rely upon the actions of Congress and the federal executive branch to provide most or all of that funding. In recent decades this has been accomplished through settlements of pending Indian water rights cases negotiated between the federal executive, the affected tribes and states, and non-Indian water users in a manner that provides water delivery infrastructure for tribes—chiefly funded by congressional appropriations. Part III describes a number of elements in the settlements that have been reached to date—a subject the Restatement does not cover. Part III concludes that the settlements have enabled tribes covered by settlements to significantly expand their water uses to improve economic conditions on their reservations. Part III observes, however, that the settlements do not entirely remedy the lasting effects on tribal economic development of federal neglect of Indian water rights in previous decades.

Part IV explains that, while the settlements to date have benefited the tribes they cover, the great majority of tribes have not yet been the subject of any water settlement. Part IV examines the prospects for significantly expanding the number of tribes that benefit from Indian water settlements implementing their reserved water rights in the near future, as well as the obstacles that presently stand in the way of attaining that goal.

I. LEGAL FRAMEWORK OF FEDERALLY RESERVED INDIAN WATER RIGHTS

A. *Winters Case*

The landmark Supreme Court decision delineating the basis and scope of federally reserved Indian water rights is *Winters v. United States*,¹ decided in 1908. *Winters* was a suit the United States commenced as trustee for the Fort Belknap Indian Tribes in northern Montana against Henry Winters and other non-Indians who had begun diverting water for irrigation upstream from the tribes' reservation.² These upstream uses prevented sufficient water from reaching reservation lands that the tribes and Bureau of Indian Affairs were developing for irrigated agriculture and related uses.³

The Fort Belknap Reservation had been established by an agreement between the tribes and the United States, ratified by an act of Congress in 1888 “as and for a permanent home and abiding place of the [tribes].”⁴ In the agreement, the tribes had also ceded territory outside the reservation to the United States; these ceded lands were then immediately opened by the United States to non-Indian settlement.⁵ Non-Indians, including Mr. Winters, acquired ceded land upstream from the reservation, irrigated that land, and obtained water rights under state law.⁶

Montana and most western states generally follow the doctrine of “prior appropriation,” under which the uses by prior appropriators are legally superior to those of junior appropriators.⁷ Thus, in times of short water supply, a senior appropriator claiming water rights under state law is entitled to their full diversion before a junior user gets to use any water.

Despite the fact that the non-Indian irrigators held senior rights under state law, the Supreme Court in *Winters* held that the tribes had superior rights to water under federal law because the agreement between the tribes and the United States, and the federal statute creating the Fort Belknap Reservation as “a permanent home” for the tribes, had implicitly reserved water rights for the tribes to use on the reservation in the future when they needed it.⁸ The Supreme Court explained that when the reservation was created, its “lands were arid and, without irrigation, were practically

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1. 207 U.S. 564 (1908).
 2. *Id.* at 565.
 3. *Id.* at 566–67.
 4. *Id.* at 565.
 5. *Id.* at 567–68.
 6. *Id.* at 568–69.
 7. *Id.* at 572; 45 AM. JUR. 2D *Irrigation* § 31 (2022).
 8. *Winters*, 207 U.S. at 565, 577–78.

valueless,”⁹ and that water had been reserved to the extent “necessary for . . . the purposes for which the reservation was created.”¹⁰ The Court affirmed an injunction against non-Indian uses that interfered with the irrigated agriculture the Bureau of Indian Affairs was developing on the reservation.¹¹

B. Repeated Failures of the United States to Implement Winters for the First Five Decades After the Decision

Given the legal holding of the *Winters* case, one might have expected that Indian reservations would have received plentiful amounts of water in the decades immediately after *Winters* was decided. In fact, precisely the opposite occurred.

There were only a handful of reported cases concerning Indian water rights between *Winters* and *Arizona v. California*.¹² The federal court decisions in this period generally adhered to *Winters* in holding that tribes held water rights that were senior to non-Indian uses initiated after a reservation was established and that the Indian uses could be increased in the future to meet “the ultimate needs of the Indians as those needs and requirements should grow.”¹³ But Congress and the federal executive basically ignored those principles and concentrated instead on developing large water projects throughout the West to promote and expand non-Indian uses of sources of water to which tribes often held senior legal rights.

For example, in 1909, a year after the *Winters* decision, the United States negotiated the Boundary Waters Treaty with Canada, one purpose of which was to authorize the United States to augment the flows of the Milk River (which entered the United States from Canada north of the Fort Belknap Reservation) to replenish the water uses of the non-Indians near the Fort Belknap Reservation through a federal reclamation project.¹⁴ No

9. *Id.* at 576.

10. *Id.* at 567.

11. *Id.* at 565, 578.

12. 373 U.S. 546 (1963); see NAT'L WATER COMM'N, WATER POLICIES FOR THE FUTURE: FINAL REPORT TO THE PRESIDENT AND TO THE CONGRESS OF THE UNITED STATES 474 n.5 (1973) (first citing *United States v. Ahtanum Irrigation Dist.*, 236 F.2d 321 (9th Cir. 1956); then citing *United States v. Walker River Irrigation Dist.*, 104 F.2d 334 (9th Cir. 1939); then citing *United States v. McIntire*, 101 F.2d 650 (9th Cir. 1939); then citing *Skeem v. United States*, 273 F. 93 (9th Cir. 1921); then citing *Conrad Inv. Co. v. United States*, 161 F. 829 (9th Cir. 1908); and then citing *United States ex rel. Ray v. Hibner*, 27 F.2d 909 (D. Idaho 1928)).

13. *Ahtanum Irrigation Dist.*, 236 F.2d at 327; accord *Conrad Inv. Co.*, 161 F. at 832; but see *Walker River Irrigation Dist.*, 104 F.2d at 340 (limiting tribal reserved rights to past irrigation uses).

14. Norris Hundley, Jr., *The “Winters” Decision and Indian Water Rights: A Mystery Reexamined*, 13 W. HIST. Q. 17, 40–41 (1982).

federal funds were provided to increase Indian water uses on the reservation, which remain essentially the same as they had been in 1910.¹⁵

This was the typical pattern throughout western states for the first six decades of the twentieth century. Congress appropriated millions of dollars each year to construct water projects operated under federal reclamation laws on the Milk River and elsewhere in the West, almost entirely to provide water to non-Indians.¹⁶ And the Bureau of Reclamation, an Interior Department agency, constructed and operated most of these non-Indian irrigation systems or contracted with irrigators within each project to administer them.¹⁷ Indians' legally prior rights to water on these same river systems, recognized in the *Winters* case, were largely ignored.¹⁸

In the very few cases that the United States did file involving Indian water rights, the United States usually failed to properly assert reserved rights as set forth in *Winters* for tribes. In Arizona, for example, the United States participated in cases in the Salt River and Gila River watersheds in which it failed to aggressively assert prior *Winters* rights claims for the Salt River and Gila River Indian Reservations that would have deprived non-Indians holding legally junior water rights of water they were using or developing to satisfy their needs.¹⁹ When the United States filed suit in federal court against non-Indian water users upstream of the Gila River Reservation in 1925—ostensibly to protect the water rights of the Gila River Indian Community—the Justice Department first successfully *resisted* the attempt of the community to intervene as a party in that suit.²⁰ The United States then entered into the Globe Equity consent decree in 1935 that awarded the community far less water than it had historically used, agreeing to a decree apportioning the additional water the community needed to upstream non-Indian users.²¹

In a Nevada case it participated in as trustee for the Pyramid Lake Paiute Tribe, the United States failed entirely to assert any *Winters* rights to protect the lake located on the tribe's reservation and the lake's unique fish resources on which the tribe depended for its livelihood.²² Instead, the

15. *See id.*

16. Monique C. Shay, *Promises of a Viable Homeland, Reality of Selective Reclamation: A Study of the Relationship Between the Winters Doctrine and Federal Water Development in the Western United States*, 19 *ECOLOGY L. Q.* 547, 550–52, 557 (1992).

17. *Id.* at 551–52.

18. *Id.* at 567–68.

19. *See Gila River Pima-Maricopa Indian Cmty. v. United States*, 695 F.2d 559 (Fed. Cir. 1982).

20. *Arizona Water Settlements Act: Joint Hearing on S. 437 Before the Subcomm. on Water and Power of the Comm. on Energy and Nat. Res. & the Comm. on Indian Affs.*, 108th Cong. 27 (2003) (statement of Richard P. Narcia, Governor of the Gila River Indian Cmty.).

21. *Id.*

22. *See Nevada v. United States*, 463 U.S. 110 (1982).

court decree allocated those waters to an upstream federal reclamation project for non-Indian water users.²³ The Justice Department actually represented both the tribe and the non-Indian reclamation project in this litigation.²⁴

The United States similarly failed to protect the reserved *Winters* water rights of another tribe in Nevada, the Shoshone-Paiute Tribes of the Duck Valley Reservation. The Nevada portion of the Duck Valley Reservation is located on the Owyhee River system, in which non-Indian water users had secured water rights to surface and groundwater under the state law prior appropriation system after the reservation was set aside for the tribes.²⁵ In 1931 the Department of Justice and Bureau of Indian Affairs prepared a complaint to protect the tribes' water rights against non-Indian water users who were interfering with the tribes' traditional uses of water for agricultural and stock uses on the reservation.²⁶ The Bureau of Reclamation had developed water projects serving those non-Indians, and this complaint was never filed due to Bureau resistance.²⁷

Throughout the first seven decades of the twentieth century, Congress appropriated paltry sums of money for developing water infrastructure on reservations at the same time it was appropriating tens of millions of dollars annually to fund water projects providing water to non-Indian irrigators and communities, often on the same river systems where tribes held legally superior water rights.²⁸ These projects clearly produced economic development for non-Indians while at the same time contributing to the near-universal poverty on Indian reservations throughout the first two-thirds of the twentieth century.²⁹ As the National Water Commission's Final Report summarized the situation in 1973,

During most of this 50-year period [following the decision in *Winters v. United States*], the United States was pursuing a policy of encouraging the settlement of the West and the creation of family-sized farms on its arid lands. In retrospect, it can be seen that this policy was pursued with little or no regard for Indian water rights and the *Winters* doctrine. With the encouragement, or at least the cooperation, of the Secretary of

23. *Id.* at 145.

24. *Id.* at 113–18.

25. S. REP. NO. 110-415, at 2 (2008).

26. *Id.* at 3.

27. *Id.*; *Shoshone-Paiute Tribes of Duck Valley Water Rights Settlement Act: Hearing Before the S. Comm. on Indian Affs.*, 110th Cong. 12–13 (2007) (statement of Kyle Prior, Chairman, Shoshone-Paiute Tribes, Duck Valley Reservation).

28. NAT'L WATER COMM'N, WATER POLICIES FOR THE FUTURE: FINAL REPORT TO THE PRESIDENT AND TO THE CONGRESS OF THE UNITED STATES 474–75 (1973); Shay, *supra* note 16, at 558.

29. Shay, *supra* note 16, at 560–61, 565.

the Interior—the very office entrusted with protection of all Indian rights—many large irrigation projects were constructed on streams that flowed through or bordered Indian Reservations, sometimes above and more often below the Reservations. With few exceptions the projects were planned and built by the Federal Government without any attempt to define, let alone protect, prior rights that Indian tribes might have had in the waters used for the projects. . . . In the history of the United States Government’s treatment of Indian tribes, its failure to protect Indian water rights for use on the Reservations it set aside for them is one of the sorrier chapters.³⁰

C. *Arizona v. California*

Arizona v. California, decided in 1963,³¹ is the only major United States Supreme Court decision since *Winters* that analyzed the nature and extent of Indian reserved water rights. The State of Arizona filed the suit in the original jurisdiction of the United States Supreme Court against California—with Nevada, New Mexico, Utah, and the United States later added as parties—to determine the rights of these states to water from the Colorado River.³² The United States intervened in the case, asserting, among other things, reserved water rights for five Indian reservations located in the lower Colorado River basin.³³

The Court referred the case to a special master,³⁴ who after trial concluded that an open-ended decree of water rights to the Indians, as in *Winters*, would put all junior water rights forever in jeopardy and severely hamper financing of non-Indian water projects, because current Indian populations and needs could change.³⁵ The master largely accepted the United States’ position in the case and determined the future needs of each reservation by deciding which reservation lands were practicably irrigable. The Supreme Court, after extensive briefing on the issues, specifically affirmed the master’s reasoning as to the Indian water rights:

[The master] found that the water was intended to satisfy the future as well as the present needs of the Indian Reservations and ruled that enough water was reserved to irrigate all the practicably irrigable acreage on the reservations. . . . How many

30. NAT’L WATER COMM’N, *supra* note 28, at 474–75.

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

32. *Id.* at 550–51.

33. *Id.* at 595.

34. *Id.* at 551.

35. Simon H. Rifkind, Special Master Report at 264, *Arizona v. California*, 373 U.S. 546 (1963).

Indians there will be and what their future needs will be can only be guessed. 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.³⁶

The five tribes in the *Arizona* case were decreed 905,496 acre-feet a year (AFY) for 136,636 practically irrigable acres,³⁷ “even though in the early 1960s, these tribes were actually irrigating less than 36,000 acres.”³⁸ This quantification allocated over twelve percent of the total dependable water supply of the Lower Colorado River—which is 7,500,000 AFY³⁹—to these five tribes, much of which they have subsequently put to actual use expanding irrigated acreage on their reservations.⁴⁰

The federal executive’s assertive legal advocacy in favor of Indian reserved water rights in the *Arizona* case represented a monumental change in federal protection and advocacy of Indian water rights, a marked deviation from the striking and repeated failures of the United States to protect and foster the usage of those rights for other tribes in the first five decades after *Winters* was decided. How this remarkable turnaround occurred is an unexplained and intriguing mystery, awaiting examination by some enterprising legal scholar into the archives of those Justice Department and Interior Department officials involved in preparing and prosecuting the Indian claims in that litigation, as well as into the voluminous court records in that protracted case.

36. *Arizona v. California*, 373 U.S. at 600–01.

37. *See Arizona v. California*, 376 U.S. 340, 344–45 (1964). An acre foot is 325,900 gallons—enough water to cover an acre with one foot of water. *Supreme Court Clears the Way for the Central Arizona Project*, BUREAU OF RECLAMATION, https://www.usbr.gov/lc/phoenix/AZ100/1960/supreme_court_AZ_vs_CA.html [https://perma.cc/WH6E-GD3E] (last visited Feb. 24, 2022). This amount of water generally is enough to supply all the municipal and drinking water needs of a family of five in a city or suburb. *See What’s an Acre-foot?*, WATER EDUC. FOUND., <https://www.watereducation.org/general-information/whats-acre-foot> [https://perma.cc/PRF7-HSZH] (last visited Feb. 24, 2022). A farmer, however, must generally divert about four acre-feet to grow crops on one acre of farmland in most parts of the West (more water if the climate permits a longer growing season), which pertains to the reservation lands involved in *Arizona v. California*. *See How Much Exactly Is an Acre Foot of Water*, GILA RIVER INDIAN NEWS (Dec. 2, 2016), <https://www.gricnews.org/index.php/grin-articles/2016-articles/december-02-2016-articles/how-much-exactly-is-an-acre-foot-of-water> [https://perma.cc/5TWC-XET7].

38. Reid Peyton Chambers & John E. Echohawk, *Implementing Winters Doctrine Indian Reserved Water Rights: Producing Indian Water & Economic Development Without Injuring Non-Indian Water Users?* 5 (Univ. of Colo. Boulder Nat. Res. L. Ctr., Discussion Series No. 10, 1991).

39. *See U.S. DEP’T OF THE INTERIOR: BUREAU OF RECLAMATION, COLORADO RIVER BASIN WATER SUPPLY AND DEMAND STUDY 18* (2012).

40. Chambers & Echohawk, *supra* note 38, at 9.

II. ADJUDICATIONS INVOLVING INDIAN WATER RIGHTS SUBSEQUENT TO
ARIZONA V. CALIFORNIA

Encouraged by *Arizona v. California*, many tribes in the 1960s and 1970s increasingly began to assert and protect their water rights themselves. Tribes directed pressure on the federal executive branch, which—particularly after President Nixon’s 1970 historic Message to Congress on Indian Affairs directing that executive agencies promote tribal self-determination and adhere more closely to their trust responsibility to Indians⁴¹—also began more actively to assert the water rights of tribes and tribal members, both in litigation to quantify these rights and in settlement negotiations resolving that litigation.⁴² In 1975 the Justice Department established a special section exclusively to litigate cases in which the United States was representing Indian rights as trustee,⁴³ including water rights cases.⁴⁴ Over the years, this section—which continues to operate today—has been staffed by attorneys skilled and experienced in federal Indian law.

After *Arizona v. California*, many western state governments and non-Indian water users and water providers also began more actively to pursue adjudications of Indian water rights because of concern that the potential size of Indian water rights claims applying the principles of *Winters* and *Arizona v. California* might require substantial reductions in water uses by non-Indians whose water rights under state law were legally junior to tribal rights.⁴⁵ Like the United States and tribes, a number of

41. Special Message to the Congress on Indian Affairs, 213 PUB. PAPERS 564, 565–66 (July 8, 1970), reprinted in 116 CONG. REC. 23258, 23261 (1970); see also H.R. REP. NO. 91-361, at 8–12 (1970). President Nixon’s Message and its policy of promoting tribal authority and control over reservation affairs have been the essential federal Indian policy of every administration since 1968. See also Special Message to Congress on the Problems of the American Indian: “The Forgotten American,” 113 PUB. PAPERS 336 (Mar. 6, 1968) (President Johnson); Memorandum for the Heads of Executive Departments and Agencies on Tribal Consultation, 74 Fed. Reg. 57,881 (Nov. 5, 2009) (President Obama); Proclamation No. 7500, 66 Fed. Reg. 57,641 (Nov. 12, 2001) (President George W. Bush); Exec. Order No. 13,175, 65 Fed. Reg. 67,249 (Nov. 6, 2000) (President Clinton); Reaffirming the Government-to-Government Relationship Between the Federal Government and Tribal Governments, 1991 PUB. PAPERS 662 (June 14, 1991) (President George H.W. Bush); Statement on Indian Policy, 1983 PUB. PAPERS 96 (Jan. 24, 1983) (President Reagan).

42. The early years of this change are described in Reid Peyton Chambers, *Implementing the Federal Trust Responsibility to Indians After President Nixon’s 1970 Message to Congress on Indian Affairs: Reminiscences of Reid Peyton Chambers*, 53 TULSA L. REV. 396, 415–38 (2018).

43. *Id.* at 403.

44. *Id.* at 415–19.

45. Chambers & Echohawk, *supra* note 38, at 1, 15–17.

states began to file suits to seek definite quantifications of Indian reserved water rights.⁴⁶

The United States and tribes generally filed their suits in federal courts. By contrast, relying on a 1952 federal statute known as the McCarran Amendment,⁴⁷ several states sought to have these quantifications of Indian reserved rights—a question of federal law—adjudicated in their state court systems.⁴⁸

For most of the 1970s and early 1980s, much of the Indian water litigation focused on whether state courts had jurisdiction to determine Indian water rights that arise under federal law. The Supreme Court ultimately decided that even though federal courts had jurisdiction to determine Indian water rights, they should ordinarily defer to comprehensive state proceedings to determine Indian and other water rights in general stream adjudications filed under the McCarran Amendment.⁴⁹ Consequently, most litigation concerning Indian reserved water rights in the past four decades has proceeded in state, not federal, courts, which have, however, generally adhered to the principles of *Winters* and *Arizona v. California* in determining Indian water rights.⁵⁰

A. Wyoming Big Horn Case

The principal state court adjudication brought under the McCarran Amendment that has proceeded to final judgment was a general stream adjudication, initiated by the state of Wyoming in 1977, of the Big Horn River system; the system includes the only Indian reservation in that state:

46. *Id.* at 7.

47. Pub. L. No. 945, 66 Stat. 560 (1952) (codified at 43 U.S.C. § 666); *see also The McCarran Amendment*, U.S. DEPT. OF JUST. (May 12, 2015), <https://www.justice.gov/enrd/mccarran-amendment> [<https://perma.cc/5VMJ-PHR3>]. The McCarran Amendment authorized state courts to determine water rights of the United States in “general stream adjudications”—proceedings to adjudicate all water rights in a particular water source. U.S. DEPT. OF JUST., *supra*. Although state courts generally lack jurisdiction over cases in which the United States or an Indian tribe is a defendant, in 1971 the Supreme Court construed the McCarran Amendment—which waived the sovereign immunity of the United States to permit it to be sued in state court suits to adjudicate all its water rights in a water source—as extending to an adjudication of the reserved rights owned by the United States for a national forest. *United States v. Dist. Ct. for Eagle Cnty.*, 401 U.S. 520, 523–26 (1971). Although the Eagle County case did not involve Indian reserved rights and the McCarran Amendment did not mention Indian rights or waive tribes’ sovereign immunity from suit, more states began after the 1971 Supreme Court decision to try to adjudicate Indian water rights in state courts. Robert T. Anderson, *Indian Water Rights and the Federal Trust Responsibility*, 46 NAT. RES. J. 339, 400 (2006).

48. Anderson, *supra* note 47, at 400, 423.

49. *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545, 566–69 (1983); *see also Colorado River Water Conservation Dist. v. United States*, 424 U.S. 800, 819 (1976).

50. Anderson, *supra* note 47, at 423.

the Wind River Reservation.⁵¹ The Wyoming courts found that the Wind River Reservation had the same principal agricultural purpose as the Montana reservation involved in *Winters* and the desert southwest reservations involved in *Arizona v. California*.⁵² The Wyoming Supreme Court applied the practicably irrigable acreage standard of *Arizona v. California* and determined that the tribes' practicably irrigable acreage included Indian-owned lands that were currently irrigated or had a history of irrigation, as well as 48,000 practicably irrigable acres of Indian land on the reservation with no history of irrigation.⁵³ An annual water right of approximately 500,000 acre-feet was awarded the United States in trust for the two tribes of this reservation.⁵⁴ In 1989 twelve years after the case began, an equally divided United States Supreme Court affirmed the Wyoming Supreme Court's decision without opinion.⁵⁵ The result of the case was thus a reaffirmation of the legal principles of *Winters* and *Arizona v. California*.⁵⁶

Like *Winters* and *Arizona v. California*, the *Wyoming* case decreed only "paper water" rights without providing any infrastructure to deliver the tribes' senior legal water rights to tribal lands.⁵⁷ This limitation on the power of courts to mandate water delivery to tribes has propelled many

51. *In re Gen. Adjudication of All Rts. to Use Water in the Big Horn River*, 753 P.2d 76, 83–84 (Wyo. 1988) [hereinafter *Big Horn*].

52. *See Big Horn*, 753 P.2d at 99; *Arizona v. California*, 373 U.S. 546, 598 (1963); *Winters v. United States*, 207 U.S. 564, 576 (1908).

53. *Big Horn*, 753 P.2d at 100–01 (citing *Arizona v. California*, 373 U.S. at 600–01).

54. *See id.* at 101–11.

55. *Wyoming v. United States*, 492 U.S. 406 (1989).

56. The Montana Supreme Court similarly held that the reserved rights doctrine arises under federal law and entitles tribes "to sufficient water 'to develop, preserve, produce or sustain food and other resources of the reservation to make it livable.'" *State ex rel. Greely v. Confederated Salish and Kootenai Tribes of the Flat-Head Rsrv.*, 712 P.2d 754, 764 (Mont. 1985). The Montana Supreme Court in *Greely* observed that "*Winters* rights are difficult to quantify. Because the purposes of each reservation differ, federal courts have devised several general quantification standards. These standards differ depending upon the purpose for which the water was reserved." *Id.* at 764. The court held that the practicably irrigable acreage standard of *Arizona v. California* applied when water was reserved for agricultural purposes and that "reserved [water] rights may reflect future need as well as present use." *Greely*, 712 P.2d at 764–65.

57. While the same was true for the tribes in *Arizona v. California*, most of the lands involved in that case were relatively flat lands very close to the Colorado River, and the tribes were able to find the financial means to irrigate most of those lands in the decades following the decree. *See* U.S. BUREAU OF RECLAMATION, COLORADO RIVER BASIN TEN TRIBES PARTNERSHIP TRIBAL WATER STUDY REPORT 5.8-3, 5.8-6 (2018). In *Winters*, the Bureau of Indian Affairs had constructed the water delivery infrastructure to use the water rights decreed in that case prior to commencing the litigation. *Winters*, 207 U.S. at 566.

tribes to seek settlement of pending water adjudications that can increase their actual use of water.⁵⁸

General stream adjudications in state courts permitted under the McCarran Amendment also have proved to be extremely costly and protracted. Since all water users on a given stream system must be joined as parties, hundreds or even thousands of parties are commonly involved, and each party is adverse to every other party.⁵⁹ Trials invariably take many years, with millions of dollars in costs, expert witness fees, and attorney's fees.⁶⁰ Accordingly, there have been very few final judgments in state court general stream adjudications involving Indian water rights under the McCarran Amendment.⁶¹

B. Arizona Supreme Court Gila V Decision

Although no general stream adjudication in Arizona state courts has been concluded, the Arizona Supreme Court has issued a number of interlocutory decisions on legal issues of major importance in determining Indian water rights claims. In a major decision, *In re the General Adjudication of All Rights to Use Water in the Gila River System and Source (Gila V)*,⁶² the Arizona Supreme Court considered in some detail the basic question of “[w]hat is the appropriate standard to be applied in determining the amount of water reserved for federal” Indian reservations (and other federal lands) throughout Arizona.⁶³

The Arizona Supreme Court in *Gila V* generally followed and applied the reasoning of the United States Supreme Court in both *Winters* and *Arizona v. California*. The Arizona court started with the premise that “the essential purpose of Indian reservations is to provide Native American people with ‘a permanent home and abiding place’ . . . that is a ‘livable’ environment.”⁶⁴ The *Gila V* court then expanded existing legal principles

58. See Jesse Harlan Alderman, *Winters and Water Conservation: A Proposal to Halt “Water Laundering” in Tribal Negotiated Settlement in Favor of Monetary Compensation*, 31 VA. ENV'T L.J. 1, 1 (2013) (arguing that tribes should sue the federal government and seek financial compensation rather than negotiate settlements).

59. See A. Dan Tarlock, *The Illusion of Finality in General Water Rights Adjudications*, 25 IDAHO L. REV. 271, 272–73 (1988).

60. For example, the state of Wyoming reportedly spent \$14 million in attorney's fees in its general stream adjudication involving Indian and other water rights in the Big Horn River case during a twelve-year period. Editorial, *Wyoming's Water Dilemma*, DENV. POST, July 9, 1989, at 4-I.

61. See Amy Cordalis & Daniel Cordalis, *Indian Water Rights: How Arizona v. California Left an Unwanted Cloud over the Colorado River Basin*, 5 ARIZ. J. ENV'T L. & POL'Y 333, 352 (2014).

62. 35 P.3d 68 (Ariz. 2001).

63. *Id.* at 71.

64. *Id.* at 74 (citation omitted) (first quoting *Winters v. United States*, 207 U.S. 564, 565 (1908); and then quoting *Arizona v. California*, 373 U.S. 546, 599 (1963)).

by holding that the “practicably irrigable acreage” standard in *Arizona v. California* should *not* constitute the exclusive test for quantifying Indian reserved water rights because “[l]imiting an Indian reservation’s purpose to agriculture . . . ‘assumes that the Indian peoples will not enjoy the same style of evolution as other people, nor are they to have the benefits of modern civilization.’”⁶⁵

The *Gila V* court supported that conclusion, reasoning that “[t]he general purpose, to provide a [reservation] for the Indians[,] is a broad one and must be liberally construed” to enable “tribes to achieve the twin goals of Indian self-determination and economic self-sufficiency.”⁶⁶ The court observed “that some tribes inhabit flat alluvial plains while others dwell in steep, mountainous areas”⁶⁷ unsuitable for irrigated agricultural but in need of water for other purposes, such as for domestic and municipal uses.⁶⁸ The court ruled that the standard for quantifying Indian reserved rights to provide “a ‘permanent home and abiding place’” and “achieve the twin goals of Indian self-determination and economic self-sufficiency” necessarily changes with a reservation’s evolving purposes and includes water for on-reservation development other than agriculture, so long as such development is practically achievable and economically sound.⁶⁹

The court in *Gila V* thus concluded that the basic standard for qualifying a tribe’s water rights should be how much water is necessary to establish and maintain a permanent and livable tribal homeland and to further economic self-sufficiency.⁷⁰ While that conclusion replaces the apparently more precise and definite “practicable irrigable acreage” standard of *Arizona v. California* and *Wyoming Big Horn* with a vaguer standard requiring courts to determine how much water is necessary for a permanent and livable tribal homeland, the *Gila V* court’s insight that tribes’ water rights should *not* be measured exclusively by agricultural needs in the twenty-first century, when agriculture has become a relatively small and diminishing component of the national economy, seems correct—and consistent with the United States Supreme Court’s analysis of the underlying purposes of the reserved rights doctrine in both *Winters* and *Arizona v. California*.

65. *Id.* at 76–77 (first quoting *In re Gen. Adjudication of all Rts. to Use Water in the Big Horn River Syst.*, 753 P.2d 76, 119 (Wyo. 1988) (Thomas, J., dissenting); and then quoting *Arizona v. California*, 373 U.S. at 600).

66. *Id.* at 76 (quoting *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 47 (9th Cir. 1981)).

67. *Id.* at 78.

68. *See id.* at 78–80.

69. *See id.* at 76–79 (quoting *Winters*, 207 U.S. at 565).

70. *See id.* at 76–80.

C. Decisions Concerning Tribal Reserved Rights to Groundwater

A number of cases have considered whether Indian reserved water rights extend to groundwater beneath reservation lands. As the Restatement concludes in section 88, the great majority of courts to consider the question have determined that *Winters* rights include groundwater appurtenant to reservation land.⁷¹ In *Agua Caliente Band of Cahuilla Indians v. Coachella Valley Water District*⁷² and *In re General Adjudication of All Rights to Use Water in the Gila River System & Source (Gila III)*,⁷³ both the Ninth Circuit and Arizona Supreme Court held that *Winters* reserved water rights may extend to groundwater if groundwater use is required to fulfill the purposes of the reservation.⁷⁴ Most courts to consider this question have ruled similarly.⁷⁵

The sole exception to these holdings is the Wyoming Supreme Court's decision in *In re General Adjudication of All Rights to Use Water in the Big Horn River System*.⁷⁶ But the Wyoming Supreme Court recognized that "[t]he logic which supports a reservation of surface water to fulfill the purpose of the reservation also supports reservation of groundwater."⁷⁷ While the court held "that the reserved water doctrine does not extend to groundwater," it did so by relying on the absence of precedent on the question.⁷⁸ Notwithstanding this decision, commentators other than the Restatement agree with the majority view.⁷⁹

71. RESTATEMENT OF THE L. OF AM. INDIANS § 88 (AM. L. INST., Proposed Final Draft 2021) [hereinafter RESTATEMENT L. AM. INDIANS].

72. 849 F.3d 1262 (9th Cir. 2017).

73. 989 P.2d 739 (Ariz. 1999) [hereinafter *Gila III*].

74. *Coachella Valley Water Dist.*, 849 F.3d at 1270–71; *Gila III*, 989 P.2d at 746–48.

75. *E.g.*, *Gila River Pima-Maricopa Indian Cmty. v. United States*, 9 Cl. Ct. 660, 699–700 (1986), *aff'd*, 877 F.2d 961 (Fed. Cir. 1989) (holding that, when the Gila River Reservation was created, the groundwater under it was "impliedly . . . reserved for the Indians"); *Confederated Salish & Kootenai Tribes of the Flathead Rsr. v. Stults*, 59 P.3d 1093, 1099 (Mont. 2002) ("We see no reason to limit the scope of our prior holdings by excluding groundwater from the Tribes' federally reserved water rights in this case."); *Tweedy v. Tex. Co.*, 286 F. Supp. 383, 385 (D. Mont. 1968) ("The *Winters* case dealt only with the surface water, but the same implications which led the Supreme Court to hold that surface waters had been reserved would apply to underground waters as well."); *see also Park Ctr. Water Dist. v. United States*, 781 P.2d 90, 91–92, 95 n.13 (Colo. 1989) (holding that the United States was entitled to reserved water right of an artesian well on public land without deciding whether the doctrine "applies to groundwater in the same way as it does to surface water").

76. 753 P.2d 76, 99–100 (Wyo. 1988), *aff'd by an equally divided court sub nom. Wyoming v. United States*, 492 U.S. 406 (1989).

77. *Id.* at 99.

78. *Id.* at 99–100.

79. *See* COHEN'S HANDBOOK OF FEDERAL INDIAN LAW 1213–14 (Nell Jessup Newton ed., 2012) (explaining that groundwater "is available to satisfy tribal water rights,"

III. IMPLEMENTATION OF THE LEGAL PRINCIPLES CONCERNING INDIAN WATER RIGHTS THROUGH NEGOTIATED SETTLEMENTS AFTER *ARIZONA V. CALIFORNIA*

Dismayed by the lengthy and costly litigation to adjudicate all Indian and other water rights in a stream system to final judgment—exemplified by the Wyoming *Big Horn* case—some tribes and some states starting in the late 1970s and 1980s began to negotiate agreements settling litigation to adjudicate the tribe’s water rights claims.⁸⁰ These settlements have usually provided increased water supplies—“wet water,” not just “paper water rights”—to reservations by means of federally funded water delivery infrastructure projects.⁸¹ While this process represents an improvement in enforcing and implementing tribes’ reserved water rights, enhancing economic development on those reservations, the process has to date been limited to relatively few tribes, as discussed in Part IV.

The twenty-seven congressionally ratified Indian water rights settlements through 2010 are collected in *Cohen’s Handbook of Federal Indian Law*.⁸² Since then, six more settlements have been approved by Congress: the Hualapai-Bill Williams Water Rights Settlement Act of 2014,⁸³ the Pechanga Band of Luiseño Mission Indians Water Rights Settlement Act,⁸⁴ the Choctaw Nation of Oklahoma and Chickasaw Nation Water Settlement Act,⁸⁵ the Blackfeet Water Rights Settlement Act,⁸⁶ the Navajo Utah Settlement Act of 2020,⁸⁷ and the Montana Water Rights Protection Act.⁸⁸

Especially when contrasted with the widespread neglect of Indian water rights in the first half of the twentieth century, these settlements are impressive achievements:

The water rights of the majority of tribes in four western states—Arizona, Idaho, Colorado, and Montana—have been settled and infrastructure to deliver wet water to most of these tribes has

and “hydrology, logic, and, often, economics all prescribe that it is available to satisfy the tribal right”).

80. See Susan D. Brienza, *Wet Water vs. Paper Rights: Indian and Non-Indian Negotiated Settlements and Their Effects*, 11 STAN. ENV’T L.J. 151, 166–68 (1992).

81. See *id.* at 160, 187–88.

82. See COHEN’S HANDBOOK OF FEDERAL INDIAN LAW, *supra* note 79, at 1247–48 nn.48–49.

83. Pub. L. No. 113-223, 128 Stat. 2096 (2014).

84. Pub. L. No. 114-322, 130 Stat. 1628, subtitle D, 1755–71 (2016).

85. *Id.* at subtitle F, § 3608, 1796–1814.

86. *Id.* at subtitle G, 1814–45.

87. Pub. L. No. 116-260, 134 Stat. 1182, div. FF, tit. XI, § 1102, 3224–34 (2020).

88. *Id.* at div. DD, 3008–38.

been or is being constructed. Settlements have also been concluded for some tribes in other states, such as New Mexico, Utah, and California.⁸⁹

Notably, these existing settlements include ones settling the water rights claims of the Pyramid Lake Paiute Tribe, the Salt River Pima-Maricopa Indian Community, the Gila River Pima-Maricopa Indian Community, and the Duck Valley Paiute Shoshone Tribes—all of which were injured by derelictions of the federal government in failing to aggressively advocate their water rights in earlier litigation described in Section I.B.

Each negotiated settlement is of course uniquely crafted to fit the circumstances of the particular tribe and the water resources available to the tribe. The Restatement does not discuss the settlement process or particular settlements. Nonetheless, in my view the primary lawmaking activity regarding Indian water rights in recent years has been accomplished through negotiated settlements of Indian water rights claims approved by congressional legislation rather than by litigation.⁹⁰ Court adjudications in recent years, while important in resolving issues for the tribes and other parties involved in the particular case, have generally followed and applied the principles set forth in earlier cases discussed in Parts I and II.

A. Settlements' Treatment of Existing Non-Indian Water Uses

Perhaps the most striking aspect of these settlements is that they generally do *not* apply the legal principles of *Winters* and subsequent cases in a fashion that provides a prospective remedy that protects the legally senior Indian water rights from encroachment by legally junior non-Indian uses.⁹¹ In this respect, the settlements do not provide a complete remedy for the federal government's repeated historic failures to protect Indian water rights in litigation prior to *Arizona v. California*, accompanied by its financial and legislative support for developing water projects to supply millions of acre-feet of water annually to non-Indian water users irrespective of the existence of legally senior Indian water rights.⁹² No settlement, for example, simply prohibits the uses of water by junior non-Indian water rights holders that interfere with planned Indian uses—as the

89. Reid Peyton Chambers & Ryan Rusche, *Enforcement of Federally Reserved Indian Water Rights—Past, Present and Future*, in INDIAN LAW AND NATURAL RESOURCES: THE BASICS AND BEYOND 8-1, at 8-10 (Rocky Mountain Min. L. Found. ed., 2017).

90. CHARLES V. STERN, CONG. RSCH. SERV., R44148, INDIAN WATER RIGHTS SETTLEMENTS 6, 17 (2022), <https://crsreports.congress.gov/product/pdf/R/R44148>.

91. See Reed D. Benson, *Avoiding Jeopardy, Without the Questions: Recovery Implementation Programs for Endangered Species in Western River Basins*, 2 MICH. J. ENV'T & ADMIN. L. 473, 480–81 (2013).

92. See Brienza, *supra* note 80, at 157–60.

courts in *Winters* did—and instead allows the water the non-Indians are using to be supplied to tribes. To the contrary, despite the senior legal priority of Indian reserved rights under *Winters*, most settlements actually provide some degree of protection to existing “non-Indian uses from being ‘cut-off’ by legally prior Indian reserved water rights.”⁹³

This is noteworthy because private lawmaking through negotiations settling litigation usually closely follows the legal principles a court would apply if the case were litigated.⁹⁴ Because the caselaw recognizes a senior priority for Indian water rights over subsequent non-Indian water users, one would ordinarily expect settlements to accomplish that and recognize tribal rights to cut off junior non-Indian uses of water that tribes need. This has not been the outcome of Indian water settlements.⁹⁵

To be sure, providing some degree of protection to existing non-Indian water uses legally junior to the tribes’ reserved water rights may seem understandable given the long history of many of those existing non-Indian uses. But the primary reason for the protection of existing non-Indian uses in most settlements is that delivering water to the tribes that have a prior legal right requires both congressional ratification of the settlement and large congressional appropriations of money to enable tribes to construct the water delivery infrastructure necessary to put the tribes’ senior water rights to actual use.⁹⁶ But support for such settlements in Congress generally does not occur when states and politically powerful non-Indian entities using the water source involved oppose the settlement.⁹⁷ Accordingly, tribes have generally been required to provide some protections to these legally junior but politically influential non-Indian water users to secure the widespread support necessary to enact legislation ratifying and approving the settlement.⁹⁸

Settlements vary considerably as to their scope and the extent to which they permit existing non-Indian uses to continue without the tribe’s objecting or placing a priority call against them. For example, in the Zuni Settlement in eastern Arizona, both the tribe and major non-Indian users

93. Reid Peyton Chambers, *Reflections on the Changes in Indian Law, Federal Indian Policies and Conditions on Indian Reservations Since the Late 1960s*, 46 ARIZ. ST. L.J. 729, 768–69 (2014).

94. Robert J. Condlin, “*Cases on Both Sides*”: *Patterns of Argument in Legal Dispute-Negotiation*, 44 MD. L. REV. 65, 80–82 (1985).

95. See Erin B. Agee, Note, *In the Federal Government We Trust? Federal Funding for Tribal Water Rights Settlements and the Taos Pueblo Indian Water Rights Settlement Act*, 21 CORNELL J.L. & PUB. POL’Y 201, 211–20 (2011) (discussing various Native American reserved water rights settlements).

96. See Harold S. Shepherd, *State Court Jurisdiction over Tribal Water Rights: A Call for Rational Thinking*, 17 J. ENV’T L. & LITIG. 343, 379–85 (2002).

97. See Reed D. Benson, *A Bright Idea from the Black Canyon: Federal Judicial Review of Reserved Water Right Settlements*, 13 U. DEN. WATER L. REV. 229, 237 n.63 (2010).

98. *Id.*

in the basin developed abstracts of their legal water rights, and the settlement prohibited all other parties objecting to the rights set forth in the abstracts.⁹⁹ By contrast, the Crow Tribe-Montana Compact subordinates the tribe's water rights to water rights recognized under state law prior to the date of the Compact.¹⁰⁰

The Blackfeet Compact with the state of Montana protects water rights arising under state law from calls by the tribe in certain basins, except for certain tribal rights to storage and instream flows.¹⁰¹ The Blackfeet Tribe also agreed to defer new development of its water rights in the Milk River Basin for a period of ten years.¹⁰² The Duck Valley Settlement Agreement in Nevada provides that the respective water rights of the tribe and non-Indians shall be administered "without regard to priority dates or specific quantities ultimately decreed," but it requires non-Indian users to adhere to certain acreage limitations for irrigated agriculture and to cease their diversions in the months when stored water is not sufficient to satisfy tribal rights.¹⁰³

In the Settlement Agreement for the Soboba Band of Luiseno Indians in southern California, ratified by Congress,¹⁰⁴ the Band agreed to limit its legally superior water right (set at 9,000 AFY in the Agreement) to 4,100 AFY for fifty years.¹⁰⁵ The Taos Pueblo Settlement Agreement in New Mexico, ratified by the Taos Pueblo Indian Water Rights Settlement Act,¹⁰⁶ provides that the Pueblo shall limit its irrigation to 2,322.45 acres of land with a recent history of irrigation so long as existing non-Indian uses continue¹⁰⁷ and requires sharing of shortages on certain streams.¹⁰⁸ In addition, some settlements do specifically prohibit the state from

99. ZUNI INDIAN TRIBE WATER RIGHTS SETTLEMENT AGREEMENT IN THE LITTLE COLORADO RIVER BASIN 10–14 (2002) (highlighting articles 4.1–2, 4.6).

100. MONT. CODE ANN. § 85-20-901, arts. III.A.6, III.B.6, III.C.6, III.D.6, III.E.6, III.F.6 (2021).

101. *Id.* § 85-20-901, arts. III.C.6, III.G.6, III.F.6 (2021) (referring to separate basins within the geographic territory).

102. *Id.* § 85-20-901, art. III.F.1.d.

103. OFF. OF STATE ENG'R OF NEV., ORDER OF DETERMINATION OF WATER RIGHTS FOR THE OWYHEE RIVER AND ITS TRIBUTARIES, INCLUDING THE RIGHTS OF THE SHOSHONE-PAIUTE TRIBES OF THE DUCK VALLEY RESERVATION app. B, art. V(1) (2012).

104. Soboba Band of Luiseño Indians Settlement Act, Pub. L. No. 110-297, 122 Stat. 2975, 76 (2008).

105. SOBOBA BAND OF LUISEÑO INDIANS SETTLEMENT AGREEMENT arts. 4.1(A–B), 4.3(A) (2006).

106. Taos Pueblo Indian Water Rights Settlement Act, Pub. L. No. 111-291, 124 Stat. 3122 (2010).

107. TAOS PUEBLO INDIAN WATER RIGHTS SETTLEMENT AGREEMENT arts. 5.1.1.2, 5.1.1.2.1, 8.1 (2013).

108. *Id.* art. 8.2.

permitting new non-Indian appropriations of surface or groundwater in certain areas.¹⁰⁹

B. Settlements Generally Provide Increased Water Supplies for Indians

Most settlements augment existing water supplies for tribes, often by delivering water to tribes and reservations from infrastructure constructed with congressionally appropriated federal funds rather than by reducing existing non-Indian water uses. Arizona Indian water settlements provide some illustrative examples of the use of existing federal water projects already authorized by Congress to augment tribal water uses.

Most tribes in Arizona have been involved in general stream adjudications to determine their reserved water rights,¹¹⁰ but no pending case actually has resulted in a final judgment after an adjudication like *Big Horn* quantifying those rights. Water rights settlements with Arizona tribes, together with administrative allocations of Central Arizona Project (CAP) water to tribes made by the secretary of the interior, have resulted in 650,000 AFY—almost *half* of all the water CAP is authorized to divert from the Colorado River being dedicated in one form or another to Indian tribes in Arizona.¹¹¹ The Central Arizona Project—a federally funded reclamation project in existence since the 1990s¹¹²—had initially been envisioned when Arizona filed its Supreme Court action in 1952 in the case that led to the *Arizona v. California* decision¹¹³ to be largely devoted to providing water imported from the Colorado River into central Arizona for non-Indian agricultural users.¹¹⁴ Over time, and as tribal water settlements in Arizona have been negotiated, that project has morphed into a water delivery project principally delivering water to Indian tribes and to municipal/industrial users in non-Indian urban centers, with some tribes

109. See, e.g., ZUNI INDIAN TRIBE WATER RIGHTS SETTLEMENT arts. 4.3–4.4 (2002); ORD. OF DETERMINATION OF WATER RIGHTS, OFF. OF THE STATE ENG’R OF NEV., app. B, art. V(2) (2012); MONT. CODE ANN. § 85-20-901, arts. III.A.8, III.B.7, III.C.7, III.D.8, III.E.7 (2021); Navajo-Utah Water Rights Settlement Act, Pub. L. No. 116-260, 134 Stat. 3224 (2020).

110. See Joseph M. Feller, *The Adjudication that Ate Arizona Water Law*, 49 ARIZ. L. REV. 405 (2007).

111. Arizona Water Settlement Act, Pub. L. No. 108-451, 118 Stat. 3490 (2004).

112. *Central Arizona Project*, BUREAU OF RECLAMATION, <https://www.usbr.gov/projects/index.php?id=504> [<https://perma.cc/Q7QS-PGQ4>] (last visited Feb. 20, 2022).

113. *Supreme Court Clears the Way for the Central Arizona Project*, BUREAU OF RECLAMATION: LOWER COLO. REGION, https://www.usbr.gov/lc/phoenix/AZ100/1960/supreme_court_AZ_vs_CA.html [<https://perma.cc/8FZ2-VUYK>] (last visited Feb. 20, 2022).

114. *Agriculture and the Central Arizona Project*, CENT. ARIZ. PROJECT, https://library.cap-az.com/documents/departments/finance/Agriculture_2016-10.pdf [<https://perma.cc/WN5B-X8MW>] (last visited Feb. 20, 2022).

being authorized in their settlements to enter into long-term leases to provide portions of their CAP water to particular Arizona cities for municipal uses.¹¹⁵ While the allocations of CAP water to tribes also have reduced the project's repayment obligations to the United States, the provision of hundreds of thousands of acre-feet of water annually to tribal uses is an impressive achievement by tribes and the United States in a water-short desert state, an accomplishment that began with the advocacy of tribal rights by the United States in *Arizona v. California*.¹¹⁶

For example, the Tohono O'odham Settlement Agreement and Southern Arizona Water Rights Settlement Act¹¹⁷ require the secretary of the interior to deliver 66,000 AFY from the Central Arizona Project to the Nation.¹¹⁸ Under the White Mountain Apache Tribe Water Rights Quantification Act,¹¹⁹ the tribe is entitled to a maximum diversion of 99,000 AFY from a combination of sources, including Central Arizona Project water.¹²⁰ The Gila River Indian Community Water Rights Act recognizes the community's right to divert up to 653,500 AFY, much of it from the Central Arizona Project water.¹²¹ The Salt River Settlement Agreement quantified the total tribal water right on its reservation at 122,400 AFY from all sources,¹²² of which 13,300 AFY is provided from the Central Arizona Project.¹²³

In a similar fashion, a number of settlements outside Arizona allocate water from federal reclamation or water storage projects to augment water supplied to tribes. For example, the Duck Valley Settlement Agreement allocates all water stored in federal Wild Horse Reservoir to the tribe with limited exceptions.¹²⁴ The Crow Tribe Water Rights Settlement Act of

115. *Id.*

116. *See id.*; *see also supra* notes 31–40 and accompanying text.

117. Southern Arizona Water Rights Settlement Amendments Act of 2004, Pub. L. No. 108-457, 118 Stat. 3535.

118. *Id.* §§ 304(a), 306(a).

119. White Mountain Apache Tribe Water Rights Quantification Act of 2010, Pub. L. No. 111-291, 124 Stat. 3073.

120. *Id.* § 305(a); AMENDED AND RESTATED WHITE MOUNTAIN APACHE TRIBE WATER RIGHTS QUANTIFICATION AGREEMENT arts. 4.1.1–4.1.5, 4.3, 5.1, 5.3, 6, 7.2.1 (2013).

121. GILA RIVER INDIAN COMMUNITY WATER RIGHTS SETTLEMENT AGREEMENT art. 4.1 (2005).

122. SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY WATER RIGHTS SETTLEMENT AGREEMENT OF 1988 arts. 6.1–6.2 (1988); H.R. REP. NO. 100-868, at 11 (1988).

123. *Colorado River Basin Water Supply & Demand Study*, app. C9, at 4, 29–30, BUREAU OF RECLAMATION (2016), https://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20C%20-%20Water%20Demand%20Assessment/TR-C_Appendix9_FINAL.pdf [<https://perma.cc/23YM-DVHZ>].

124. ORD. OF DETERMINATION, OFF. OF THE STATE ENG'R OF NEV. app. B, art. VI.3 (2012).

2010¹²⁵ allocates 300,000 AFY, impounded by the Bureau of Reclamation by Yellowtail Dam and stored in Big Horn Lake to the tribe, with only 150,000 AFY to be used in years of normal flows.¹²⁶ Similarly, the Blackfeet Water Rights Settlement Act of 2016¹²⁷ allocates to the tribe 45,000 AFY of water stored in Lake Elwell, a federal storage project.¹²⁸ The Taos Pueblo Agreement directed the secretary of the interior to deliver 2,215 AFY to the Pueblo from the federal San Juan Chama Project.¹²⁹

C. Many Settlements Recognize Tribes' Rights to Groundwater

Many settlements recognize that Indian reserved rights to water include groundwater; some settlements expressly allow tribes to use certain amounts of groundwater on their reservations.

Congress has recognized tribes' rights to use substantial quantities of groundwater in several statutes ratifying settlements with tribes in Arizona,¹³⁰ both before and after the Arizona Supreme Court's decision in *Gila III*, discussed in Section II.C. The Gila River Indian Community Water Rights Settlement Act of 2004¹³¹ includes a right to divert 156,700 acre-feet of underground water a year.¹³² The White Mountain Apache Tribe Water Rights Quantification Act of 2010¹³³ approves a settlement that gives the tribe the "permanent right to Divert Groundwater from any location within the Reservation" up to 74,000 AFY (and 27,000 AFY of depletions).¹³⁴ The Zuni Indian Tribe Water Rights Settlement Act of 2003¹³⁵ ratifies a settlement confirming the tribe's right to use up to 1,500

125. Crow Tribe Water Rights Settlement Act of 2010, Pub. L. No. 111-291, § 408(a)(1), 124 Stat. 3097, 3106.

126. *Id.*

127. Blackfeet Water Rights Settlement Act of 2016, Pub. L. No. 114-322, § 3709, 130 Stat. 1814, 1824.

128. *Id.*

129. TAOS PUEBLO INDIAN WATER RIGHTS SETTLEMENT AGREEMENT, *supra* note 107, art. 5.4.

130. See Salt River Pima-Maricopa Indian Community Water Rights Settlement Act of 1988, Pub. L. No. 100-512, 102 Stat. 2549; Southern Arizona Water Rights Settlement Amendments Act of 2004, Pub. L. No. 108-151, 118 Stat. 3536, 3553.

131. Gila River Indian Community Water Rights Settlement Act of 2004, Pub. L. No. 108-401, 118 Stat. 3499.

132. See AMENDED AND RESTATED GILA RIVER INDIAN COMMUNITY WATER RIGHTS SETTLEMENT AGREEMENT art. 4.1 (2005).

133. White Mountain Apache Tribe Water Rights Quantification Act of 2010, Pub. L. No. 111-291, 124 Stat. 3073.

134. AMENDED AND RESTATED WHITE MOUNTAIN APACHE TRIBE WATER RIGHTS QUANTIFICATION AGREEMENT, *supra* note 120, arts. 4.1, 6.1.

135. Zuni Indian Tribe Water Rights Settlement Act of 2003, Pub. L. No. 108-34, 117 Stat. 782, 796.

AFY of groundwater from specified lands for restoration activity on the Zuni Heaven Reservation and to provide water for a Sacred Lake.¹³⁶

The Yavapai-Prescott Indian Tribe Water Rights Settlement Act of 1994¹³⁷ and Yavapai-Prescott Indian Tribe Water Rights Settlement Agreement (June 25, 1995)¹³⁸ recognize that the tribe has the “right and entitlement to the on-Reservation beneficial use of all groundwater beneath the Reservation.”¹³⁹ The tribe’s pumping and use of its on-reservation groundwater supply is subject to a groundwater management plan that must be in conformity with the Water Service Agreement between the tribe and city of Prescott and compatible with the groundwater management plan for the surrounding Prescott Active Management Area.¹⁴⁰ The San Carlos Apache Tribe Water Rights Settlement Act of 1992¹⁴¹ ratified a settlement that provides the tribe (and the United States on its behalf) with “the permanent right to . . . Diversion, use, and storage of all Groundwater beneath the Reservation, subject to the Groundwater Management Plan referred to in Section 3710(d) of the Act.”¹⁴² The 1992 Act directs the secretary of the interior to “establish a ground water management plan for the San Carlos Apache Reservation which, except as is necessary to be consistent with the provisions of [the Act], will have the same effect as a management plan developed under Arizona law.”¹⁴³

The Southern Arizona Water Rights Settlement Act of 1982 (SAWRSA),¹⁴⁴ as amended in 2004,¹⁴⁵ allocates 13,200 AFY of groundwater to the Tohono O’odham Nation.¹⁴⁶ Under the Act, the Tohono O’odham Nation agreed to limit its on-reservation groundwater pumping to this 13,200 AFY—no more than 10,000 AFY from beneath the San Xavier Reservation and 3,200 AFY from beneath the eastern

136. *Id.* §§ 8(e), 796, 4(b)(2), 785.

137. Yavapai-Prescott Indian Tribe Water Rights Settlement Act of 1994, Pub. L. 103-434, 108 Stat. 4526, *amended by* Pub. L. 104-91, 110 Stat. 7, 14–15 (1996).

138. YAVAPAI-PRESCOTT INDIAN TRIBE WATER RIGHTS SETTLEMENT AGREEMENT (1995).

139. *Id.* § 4.3; *see* Yavapai-Prescott Indian Tribe Water Rights Settlement Act § 101, 108 Stat. at 4527.

140. YAVAPAI-PRESCOTT INDIAN TRIBE WATER RIGHTS SETTLEMENT AGREEMENT, *supra* note 138, § 7.1.

141. San Carlos Apache Tribe Water Rights Settlement Act of 1992, Pub. L. No. 102-575, 106 Stat. 4600, 4740–52.

142. SAN CARLOS APACHE TRIBE WATER RIGHTS SETTLEMENT AGREEMENT ¶ 4.3 (1999).

143. § 3710(d), 106 Stat. at 4750.

144. Southern Arizona Water Rights Settlement Act of 1982, Pub. L. No. 97-293, §§ 301–315, 96 Stat. 1261, 1274–85.

145. Southern Arizona Water Rights Settlement Act of 2004, Pub. L. No. 108-451, §§ 301–315, 118 Stat. 3478, 3535–73.

146. *Id.* §§ 303(30), 307(a)(1).

Schuk Toak District, respectively.¹⁴⁷ The Nation must comply with water management plans established by the secretary under section 308(d) of the Act.¹⁴⁸ Also, whether this 13,200 AFY of groundwater the tribe is allowed to pump will be available in any year is not guaranteed.¹⁴⁹ The tribe is authorized to pump only that amount—and no more—if the water is physically available and recoverable.¹⁵⁰ The tribe, however, retains deferred pumping rights for any portion of those amounts not pumped in a given year, subject to certain limitations.¹⁵¹ The Salt River Pima-Maricopa Indian Community Water Rights Settlement Act of 1988¹⁵² allocates 23,250 AFY of groundwater to the community to be pumped only from certain locations on the reservation.¹⁵³

Some Arizona settlements specifically waive tribes' rights to object to certain off-reservation groundwater uses by non-Indians. Section 12.9.4 of the Amended and Restated White Mountain Apache Tribe Water Rights Quantification Agreement¹⁵⁴ states,

Except as provided in Subparagraph 12.6.1(i) and 12.7.1(f), the WMAT and the United States acting in its capacity as trustee for the WMAT shall not: (1) object to the use of any well located

147. *Id.* § 307(a)(1)(A)–(B).

148. *Id.* § 307(a)(1)(C).

149. *Id.* § 308(f)(3).

150. *See id.* §§ 307(a)(1)(A)–(B), 308(f).

151. *Id.* The exception applies only if the secretary is unable in any year to deliver the full amounts of surface water guaranteed to the Nation from the CAP or alternative sources under sections 304(a) and 306(b). *Id.* § 308(h). Exempt wells on the reservation, defined as wells producing less than thirty-five gallons per minute, are not subject to the on-reservation groundwater pumping restrictions on the Nation. *Id.* §§ 308(g), 303(21).

152. Salt River Pima-Maricopa Indian Community Water Rights Settlement Act of 1988, Pub. L. 100-512, 102 Stat. 2549.

153. According to the Agreement, 17,400 AFY are allocated from north of the Arizona Canal and 5,850 AFY are allocated south of the Arizona Canal. *See SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY WATER RIGHTS SETTLEMENT AGREEMENT OF 1988*, *supra* note 122, arts. 6.1–6.2. The community can pump another 10,000 acre-feet of groundwater as replacement water if a surface water/effluent exchange agreement with certain non-Indian water-using entities (described in paragraph 7 of the settlement agreement) becomes inoperative. *See id.* art. 11.7.

The Salt River Act was enacted in part to settle pending litigation by the United States and the community against groundwater pumpers outside the reservation. The United States, as part of the settlement, agreed to dismiss with prejudice a suit it had filed as trustee for the community against the city of Phoenix to enjoin groundwater pumping outside the reservation because of the pumping's impact on reservation groundwater uses and aquifers. *Id.* ¶ 3(c). The community also agreed to dismiss with prejudice a suit it had filed against the United States for past failures to protect reservation groundwater uses and aquifers, as well as a suit it had filed against over 250 off-reservation groundwater users. *Id.* ¶ 3(a)–(b); *see also* H.R. REP. NO. 100-868, at 11 (1988).

154. AMENDED AND RESTATED WHITE MOUNTAIN APACHE TRIBE WATER RIGHTS QUANTIFICATION AGREEMENT (2012).

outside the boundaries of the Reservation or the Off-Reservation Trust Land in existence on the Enforceability Date; or (2) object to, dispute or challenge after the Enforceability Date the drilling of any well or the withdrawal and Use of Water from any well in the Little Colorado River Adjudication Proceedings, the Gila River Adjudication Proceedings or in any other judicial or administrative proceeding.¹⁵⁵

In the third amendment to the San Carlos Apache Settlement Agreement, the San Carlos Apache Tribe agreed to allow the city of Globe to continue its withdrawals from the Cutter Aquifer, which straddles the reservation, in exchange for the city providing some of its allocation of Central Arizona Project water to the tribe.¹⁵⁶ The tribe waived its right to object to these off-reservation groundwater withdrawals by the city of Globe.¹⁵⁷

Congressionally approved settlements have also confirmed tribal rights to use groundwater in California, Montana, Idaho, Utah, and New Mexico. In the Soboba Band of Luiseño Indians Settlement Act,¹⁵⁸ Congress approved a settlement confirming the Band's "prior and paramount right, superior to all others," to pump 9,000 AFY of groundwater on the Soboba Reservation in southern California.¹⁵⁹ The Chippewa Cree Tribe of the Rocky Boy's Reservation Indian Reserved Water Rights Settlement and Water Supply Enhancement Act of 1999¹⁶⁰ approves a settlement quantifying the tribe's right, with priority dates of 1888 and 1916, to divert and use—with certain protections for existing state-based water users—2,615 AFY of groundwater from certain creek and drainage basins and providing the tribe with the right to develop additional groundwater on the reservation.¹⁶¹ The Fort Hall Indian Water

155. *Id.* ¶ 12.9.4. The exceptions to this waiver permit the tribe to assert claims arising after the Agreement's enforceability date for injury to water rights resulting from pumping of water within certain areas of national forest land surrounding the reservation if that water is used on the land or is transported off for municipal, commercial, or industrial use. *Id.* ¶¶ 12.6.1(i), 12.7.1(f).

156. *San Carlos Apache Tribe Water Rights Settlement Act of 1991: Joint Hearing on S. 291 and H.R. 748 Before the S. Select Comm. on Indian Affs. and the H. Comm. on Interior and Insular Affs.*, 102d Cong. 168–69 (1991) (written statement of Robert Hickman, Mayor, Globe, Arizona).

157. SAN CARLOS APACHE TRIBE WATER RIGHTS SETTLEMENT AGREEMENT, *supra* note 142, ¶ 18.2(c).

158. Pub. L. No. 110-297, 122 Stat. 2975 (2008).

159. *Id.* § 2(a)(5).

160. Chippewa Cree Tribe of the Rocky Boy's Reservation Indian Reserved Water Rights Settlement and Water Supply Enhancement Act of 1999, Pub. L. No. 106-163, 113 Stat. 1778.

161. *Id.*; MONT. CODE ANN. § 85-20-601, art. III.A (2021).

Rights Act of 1990¹⁶² approves a settlement confirming the Shoshone-Bannock Tribes' right—under the *Winters* doctrine—to divert 159,200 AFY of groundwater.¹⁶³ The consent decree approving the settlement also identified the source of the tribes' groundwater rights as the “*Winters Doctrine*.”¹⁶⁴

The Shivwits Band of the Paiute Indian Tribe of Utah Water Rights Settlement Act¹⁶⁵ confirms the Shivwits Band's right in perpetuity to pump and use 100 AFY of groundwater on its reservation with a 1916 priority date, the year the reservation was created.¹⁶⁶ The court decree approving the settlement identifies this as “a federal reserved water right.”¹⁶⁷ The Northwestern New Mexico Rural Water Projects Act¹⁶⁸ confirms a settlement providing for the Navajo Nation's reserved rights, with an 1868 priority date, to divert up to 2,000 AFY of groundwater from Navajo lands in the San Juan River Basin in New Mexico.¹⁶⁹ The Taos Pueblo Indian Water Rights Settlement Act¹⁷⁰ confirms a settlement allocating groundwater for municipal uses and protecting the Pueblo's Buffalo Pasture, a “culturally sensitive and sacred wetland currently impacted by groundwater development” on Pueblo land.¹⁷¹ The Jicarilla Apache Tribe Water Rights Settlement Act¹⁷² confirms the tribe's unlimited right to withdraw and use groundwater on its reservation in New Mexico, provided that it does not deplete either the San Juan River or the Rio Chama stream systems.¹⁷³

162. Pub. L. No. 101-602, 104 Stat. 3059 (1990).

163. *Id.* § 4.

164. Partial Final Consent Decree Determining the Rights of the Shoshone-Bannock Tribes to the Use of the Water in the Upper Snake River Basin, *In re SRBA* (Dist. Ct. Idaho Aug. 2, 1995) (No. 39576).

165. Pub. L. No. 106-263, §§ 2(4), 7(a), 114 Stat. 737 (2000).

166. *Id.* §§ 2(4), 7(a)(3).

167. SHIVWITS BAND OF THE PAIUTE INDIAN TRIBE OF UTAH WATER RIGHTS SETTLEMENT AGREEMENT (2001).

168. Pub. L. No. 111-11, 123 Stat. 1367 (2009).

169. *Id.* § 10701(a); Partial Final Judgment and Decree of the Water Rights of the Navajo Nation, *New Mexico v. United States* (Dist. Ct. N.M. Aug. 9, 2010) (No. CIV 75-184).

170. Pub. L. No. 111-291, 124 Stat. 3122 (2010).

171. *Id.* § 502, 124 Stat. 3122; *Legislative Hearing on H.R. 3254, to Approve the Taos Pueblo Indian Water Rights Settlement Agreement, and for Other Purposes Before the H. Subcomm. on Water and Power of the Comm. on Nat. Res.*, 111th Cong. 10–11 (2009) (statement of Hon. Michael L. Connor, Comm'r, United States Department of the Interior).

172. Pub. L. No. 102-441, 106 Stat. 2237 (1992).

173. *Id.* § 6, 106 Stat. at 2239.

IV. THE FUTURE PROSPECTS FOR IMPLEMENTING THE PRINCIPLES OF
WINTERS AND ITS PROGENY THROUGH FEDERALLY FUNDED INDIAN
WATER RIGHTS SETTLEMENTS

While water settlements have produced dramatic improvements in water use and economic development for tribes covered by those settlements (in contrast to litigation, which establishes “paper” rights but does not provide infrastructure to deliver water to reservations), water settlements over the past four decades have resolved the water rights of fewer than forty Indian tribes. This is an average of roughly one tribal settlement a year. There are over 350 federally recognized Indian tribes in the United States outside Alaska; thus, the great majority of tribes have *not* been able to finalize water settlements during the past four decades since the first settlements were approved.

As discussed in Part III, finalizing and securing congressional approval of projects delivering water to implement tribes’ federally reserved water rights are dependent on the actions of the federal executive, state governments, and Indian tribes. Congress must also approve settlements that require federally funded water delivery infrastructure.¹⁷⁴

The three key executive branch agencies most involved in Indian water settlements are the Department of the Interior, the Department of Justice, and the Office of Management and Budget (OMB). A primary obstacle to substantially expanding the implementation of tribal reserved water rights through federally funded settlements for all remaining Indian tribes is cost: for the federal government to settle the water rights of these additional tribes during the near future likely would be considerably more expensive than the completion of the roughly three dozen settlements in the past four decades.

In the course of considering Indian water settlements over the past four decades, the federal executive has struggled to balance conflicting policy objectives. On the one hand, since *Arizona v. California* and *Big Horn*, most federal officials at the Justice and Interior Departments generally have sought to protect Indian water rights by furthering Indian water settlements. On the other hand, Indian water settlements typically take many years of federal appropriations, and the appropriations for water settlements generally come out of the budget allocations of Interior Department agencies—either the Bureau of Indian Affairs or the Bureau of Reclamation.¹⁷⁵ Indeed, approximately ten percent of the total budget of the Bureau of Reclamation in recent years has been devoted to Indian

174. Shepherd, *supra* note 96.

175. *Addressing the Needs of Native Communities Through Indian Water Rights Settlements: Hearing Before the S. Comm. on Indian Affs.*, 114th Cong. 5–9 (2015) (statement of Hon. Michael L. Connor, Deputy Sec’y, U.S. Dep’t of the Interior).

water rights settlements.¹⁷⁶ This budgetary pressure has constrained support for Indian water settlements from officials in the Bureau of Indian Affairs and Bureau of Reclamation; the more generic fiscal constraints of the federal budget that face all federal agencies have also dampened support.¹⁷⁷ OMB, which coordinates and must approve the position of all federal executive agencies on any legislative proposal, has been especially mindful of these budgetary fiscal constraints.¹⁷⁸

These conflicting objectives are embedded in the Interior Department's *Criteria and Procedures for the Participation of the Federal Government in Negotiations for Settlements of Indian Water Rights Claims*.¹⁷⁹ Those *Criteria and Procedures* were originally adopted primarily as an executive branch reaction to Congress's consideration and enactment of several tribal water settlements presented to it and supported by tribes and states, including non-Indian water users and providers.¹⁸⁰ The Justice and Interior Departments and OMB believed that Congress and the tribal and state proponents of these settlements had sometimes proceeded without allowing sufficient input from the executive branch agencies.¹⁸¹ For example, one congressionally enacted settlement in the early 1980s, for the Papago (now Tohono O'odham) Tribe, was initially vetoed by President Reagan principally on the ground that it had been negotiated without sufficient input from federal agencies.¹⁸²

Because the *Criteria and Procedures* were developed in the context of settling pending litigation, they focus mostly on litigation-type concerns rather than the broader need of tribes for increased water supplies. For example, they measure the size of a federal contribution to a settlement by the United States' exposure to litigating costs or legal liability if a case were lost—not principally by reference to the goals of furthering tribal economic self-sufficiency or fulfillment of the federal trust responsibility and implementation of the *Winters* and *Arizona v. California* cases in the circumstances of a particular tribe.¹⁸³ The agencies' consideration of tribal

176. U.S. DEP'T OF THE INTERIOR, FISCAL YEAR 2021: THE INTERIOR BUDGET IN BRIEF 83 (2020).

177. STERN, *supra* note 90.

178. *Id.*; OFF. OF MGMT. & BUDGET, THE WHITE HOUSE, <https://www.whitehouse.gov/omb/> [<https://perma.cc/Q5ST-DB3C>] (last visited Mar. 6, 2022).

179. *Criteria and Procedures for Indian Water Rights Settlements*, 55 Fed. Reg. 9223 (Mar. 12, 1990).

180. *See* Statement on Signing the Puyallup Tribe of Indians Settlement Act, 1 PUB. PAPERS 771, 772 (June 21, 1989); Daniel McCool, *Indian Water Settlements: The Prerequisites of Successful Negotiation*, 21 POL'Y STUD. J. 227, 227 (1993).

181. *See* McCool, *supra* note 180, at 231–32, 236.

182. PRESIDENT RONALD REAGAN, VETO OF H.R. 5118, H.R. Doc. No. 97-191 (1982).

183. *Criteria and Procedures for Indian Water Rights Settlements*, 55 Fed. Reg. at 9223.

water settlements too often has become focused more on what the United States *must* do, not on what it *should* do as a proper trustee for tribes or to implement and enforce the tribal water rights to which a tribe would legally be entitled if a court were to quantify the rights by applying *Winters* and its progeny.

In addition, since the *Criteria and Procedures* were developed primarily to settle pending litigation, a principal focus of the United States in reviewing and approving recent water settlements has increasingly become to secure waivers of every conceivable water claim a settling tribe might have against the United States for its historic past failures in the decades following *Winters* and in more recent years to provide sufficient water to the tribe.¹⁸⁴ In my experience, and that of other tribal attorneys negotiating water rights settlements with the United States, the number and scope of waivers sought by the executive branch in return for its support of a water settlement have greatly expanded since 1990, when the *Criteria and Procedures* were adopted. States also have sometimes insisted on tribes waiving rights not directly related to water rights to secure their support for the settlement.¹⁸⁵ The focus of Congress and the federal executive on securing broad, comprehensive waivers by tribes of additional water rights claims as a condition to providing federally funded infrastructure to deliver water to tribes is anomalous: I know of no other instances where Congress and the executive branch have insisted that other water users waive legal claims in return for federal or state support of funding water delivery infrastructure projects or improvements. This waiver of past rights and claims is uniquely imposed on Indian tribes.

Another serious consequence of the *Criteria and Procedures*' focus on settling pending lawsuits is that settlements have been limited mostly to tribes that are actively engaged in litigating their water rights.¹⁸⁶ That excludes virtually all tribes with reservations along the mainstems of the largest western rivers—the Colorado, Columbia, and Missouri Rivers, and the Rio Grande—because there have been no pending general stream adjudications on those mainstems, mainly because of the prohibitive costs of joining all water users in such suits and because of the interstate character of most of these mainstream rivers. (The mainstream Lower Colorado River, which was apportioned between three Lower Basin States by the Supreme Court in *Arizona v. California*, is a lone exception.) It also excludes all tribes in North and South Dakota because there are no pending

184. See, e.g., Pechanga Band of Luiseño Mission Indians Water Rights Settlement Act, Pub. L. No. 114-332, § 3407, 130 Stat. 1755, 1762 (2016); Blackfeet Water Rights Settlement Act, Pub. L. No. 114-332, § 3720, 130 Stat. 1814, 1839–41 (2016); White Mountain Apache Tribe Water Rights Quantification Act of 2010, Pub. L. No. 111-291, § 309, 124 Stat. 3073, 3084–86 (2010).

185. See, e.g., CHARLES V. STERN, CONG. RSCH. SERV., R44148, INDIAN WATER RIGHTS SETTLEMENTS 20 (2019) (identifying Utah as a party to the waiver).

186. See STERN, *supra* note 90, at 3–4.

general stream water adjudications in these states. Nor are there pending Indian water rights adjudications in most states east of the 100th meridian, where water rights under state law are not set by priority of appropriation and use.¹⁸⁷

It is true, of course, that implementation and enforcement of the legally reserved water rights of all Indian tribes would entail substantial federal expense. As a normative matter, expanding the benefits of water rights settlements to all tribes seems mandated on grounds of equity, both with respect to tribes that have entered into settlements and with respect to non-Indian water users who have benefited from the federally funded water delivery projects over the past century, as discussed in Section I.B. As noted in Section I.B, these projects store and deliver tens of millions of acre-feet a year to non-Indian irrigators and municipalities in western states, often in disregard of the tribes' superior legal rights to the same water. That program produced substantial prosperity and furthered economic self-sufficiency for non-Indian communities throughout western states, leaving tribes irretrievably behind.¹⁸⁸

Commensurate federal investment in water development on all Indian reservations likely would provide comparable benefits for tribes in addition to enforcing and implementing their long-neglected legal rights to water. That the great majority of Indian reservations today lack sufficient water needed to achieve economic self-sufficiency, the standard in the *Gila V* case, is clear. For example, in 2003 the United States Commission on Civil Rights reported that fifty percent of homes on Indian reservations lacked complete plumbing facilities—full kitchens and bathrooms with running water.¹⁸⁹ Attaining economic self-sufficiency is virtually impossible for tribes where tribal members must perform time-consuming tasks such as hauling water from community wells and transporting laundry dozens of miles to towns bordering their reservations. An inordinate amount of time must be spent both in hauling water from community wells that often do not meet federal safe-drinking-water standards¹⁹⁰ and in traveling considerable distances to non-Indian towns outside the reservation to perform essential personal tasks, such as

187. See Lawrence J. MacDonnell, *Prior Appropriation: A Reassessment*, 18 U. DENV. WATER L. REV. 228 (2015); Judith V. Royster, *Winters in the East: Tribal Reserved Rights to Water in Riparian States*, 25 WM. & MARY ENV'T L. & POL'Y REV. 169 (2000).

188. See *supra* Section I.B.

189. DAVID H. GETCHES, CHARLES F. WILKINSON, ROBERT A. WILLIAMS, MATTHEW L.M. FLETCHER & KRISTEN A. CARPENTER, *CASES AND MATERIALS ON FEDERAL INDIAN LAW* 20 (7th ed. 2017).

190. See Frances Stead Sellers, *It's Almost 2020, and 2 Million Americans Still Don't Have Running Water, According to Report*, WASH. POST (Dec. 11, 2019), https://www.washingtonpost.com/national/its-almost-2020-and-2-million-americans-still-dont-have-running-water-new-report-says/2019/12/10/a0720e8a-14b3-11ea-a659-7d69641c6ff7_story.html [<https://perma.cc/SV9S-J4LX>].

laundering clothes. The disparately harsh impacts of COVID-19 on Indian reservations over the past two years have been in part a consequence of lack of access to safe and readily available drinking water supplies on many reservations.¹⁹¹

If water supplies for the remaining reservations are not addressed and augmented, most of these reservations are very likely doomed to continued poverty and economic underdevelopment. Such an outcome is contrary to sound public policy, as well as to the intentions of the United States when it entered into treaties or took other actions establishing the reservations a century or more ago, as construed by the United States Supreme Court in *Winters* and *Arizona v. California*. Such an outcome is also contrary to what should be the primary normative goals of federal Indian water policy.

191. Heather Tanana, Julie Combs & Aila Hoss, *Water Is Life: Law, Systemic Racism, and Water Security*, 19 HEALTH SEC. (SUPP.) S-78 (2021).