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The American Indian Water Rights Dilemma: Historical Perspective and Dispute-Settling Policy Recommendations

Lloyd Burton*

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I. INTRODUCTION

A. Purposes of This Research

In 1952, the U.S. Congress adopted a policy favoring the dissolution of American Indian tribes and the sale of reservation lands to

non-Indian interests. When asked if such an approach would not violate existing treaties between the tribes and the United States, the Utah senator who authored the policy said: "[I]t is like the treaties with Europe. They can be renounced at any time . . . [s]o that that question of treaties, I think, is going to largely disappear."

Responding to this political effort at tribal eradication, legal scholar Felix Cohen observed that

the Indian plays much the same role in our American society that the Jews played in Germany. Like the miner's canary, the Indian marks the shifts from fresh air to poison gas in our political atmosphere; and our treatment of Indians, even more than our treatment of other minorities, reflects the rise and fall in our democratic faith.²

When these two men aired their respective views on Indian sovereignty and American honor more than a generation ago, the resource in dispute was land. Today it is water.

Indian tribes in the American West are alleging senior rights to a great deal of surface and groundwater—some of which already is being used by non-Indians in accordance with state water laws. In the Colorado River Basin alone, tribal claims collectively would, if fully satisfied, represent the largest single call on the river. Nearly fifty major disputes involving Indian water rights are now slowly working their way through various state and federal adjudicatory processes throughout the West.³

Tribal gains in this latest round of western water wars will mean non-Indian losses of both legal entitlements and wet water. Furthermore, nobody makes money but legal counsel when water rights are in dispute; neither public nor private investors in western states are eager to plunge capital into taking water the courts may later rule was not theirs to take. Presently unused water may stay unused until some fundamental legal questions have been answered. The magnitude of tribal claims and the substantial degree of economic and legal uncertainty created by their pursuit are two reasons why the settlement of Indian water rights disputes are of enormous significance to the future of the American West.

More importantly, the way in which these issues are handled will reflect quite directly on the moral character of the American people

^{1.} Statement of Sen. Arthur V. Watkins (R. Utah), chairman, Senate Subcommittee on Indian Affairs (1953), reprinted in D. GETCHES & C. WILKINSON, FEDERAL INDIAN LAW 132-33 (2d ed. 1986).

^{2.} Cohen, The Erosion of Indian Rights, 1950-53, 62 YALE L.J. 348, 390 (1953).

^{3.} J. Folk-Williams, What Indian Water Means to the West: A Sourcebook 30-31 (1982).

and the government which represents them. Official federal policy toward indigenous Americans during the last two centuries has ranged from generosity to genocide; from respect for cultural diversity and independence to its brutal suppression. The vividly contrasting views of Senator Watkins and Felix Cohen reflect a powerful and enduring paradox in U.S.-tribal relations, which predates even the American Revolution.

Historically, American governmental leaders and their supporters have been most honorable in their dealings with indigenous peoples at times when they were least covetous of resources the tribes controlled. Conversely, some of American history's sorriest chapters have been written during periods when the dominant culture demanded something indigenous minorities did not wish to relinquish.

As a student of dispute resolution theory and practice, my first interest was in learning why, compared to other categories of civil litigation, contemporary American Indian water rights cases have proven so resistant to negotiated settlement. What soon became clear was that the answer lies deep in the history of relations between American Indian⁴ tribes and the U.S. Government. A related finding was that, as yet, no detailed case-by-case account of the historical development of Indian water law seems to exist.

In preparing this article, then, three principal goals emerged. The first was to provide a detailed historical perspective on the American Indian water rights dilemma; the second was to use this perspective as a basis for understanding why these water rights cases have proven so resistant to negotiated resolution, and the third was to use this historical perspective as the groundwork for

^{4.} There are three reasons why the term American Indian instead of "Native American" is used in this article. The first is based on the comments of some Indian rights advocates who identify themselves with pride as American Indians; it is a term of choice among many indigenous peoples. Secondly, the term differentiates the tribes in the 48 contiguous states (whose rights are the subject of this study) from Eskimos, Aleuts, and Hawaiians, who are also indigenous to what is now American soil. And thirdly, I have found that the term "Native American" rubs salt in the old wounds of Indian/Anglo relations in many parts of the West. It is a pointed reminder of whose ancestors got here first, and what happened to them when the next group arrived. Further, it reinforces the sense of transience and rootlessness which is already too much a part of the dominant culture; we probably need to develop a more lasting sense of connectedness with our land before we will be capable of taking better care of it. In the broader use of the word, anyone born on the American continent is a native, including the lightskinned descendants of northern Europeans. The irony is that while "American Indian" communicates meaning more precisely, it is also a continuing remainder of the early land-hungry European immigrants' need to regard this continent's dark-skinned indigenous population as somehow "foreign."

the formulation of selected dispute-settling policy recommendations. What follows is a movement from historical description to analysis of current legal issues to the suggestion of dispute-settling mechanisms which may afford to both Indian and non-Indian culture groups in the western states some sense that justice has been done.

B. Early Historical Context

Based on the evidence cited in this article, three recurrent themes or trends in the history of American Indian water rights can be identified. First, in natural resource entitlement disputes the federal judiciary has tended to treat North American Indian tribes as individual, nation-like entities, in accordance with the status implicitly assigned them by original provisions of the U.S. Constitution.⁵ However, in keeping with the realpolitik of westward expansion, Congressional and executive branch policy makers—unlike the judiciary—have come to regard the tribes not as separate semi-autonomous nation-states with ancient rights to natural resources; rather, they have come to see the tribes collectively, as just one more ethnic minority group struggling for parity in the distribution of national wealth. This divergence in perspective between the courts and the more politically sensitive branches has left the federal government beset by a fundamental ambivalence regarding the status, rights, and entitlements of American Indian tribes.

Second, the tribes have usually fared worst in terms of retaining control of their natural resource base (land, water, minerals, wild-life) during periods when the national government paid maximum deference to the rights of states. This is so because it is the states which compete most directly with the tribes for economic benefits arising from control of resource development.

And third, a stark parallel may be drawn between the process which created the Indian reservations in the 19th century, when the tribes relinquished theoretical sovereignty over vast areas in return for "federally protected" control over much smaller amounts of land; and the process of present-day western water rights negotiations, in which the federal executive branch, the states, and assorted business interests are urging the tribes to abandon water rights claims in return for federal delivery of much smaller amounts of

^{5.} Specifically, art. I, § 8, cl. 3.

water.6

The dichotomous relationship between the federal courts on the one hand and Congress and the executive on the other is best exemplified by the earliest judicial decisions defining Indian legal status as set against resultant actions by the other two branches and the governments of states in which Indian tribes were located.

Under the leadership of Chief Justice John Marshall, in the early 19th century, the U.S. Supreme Court first subjugated the rights of American Indian tribes unequivocally to the will of the federal government. In 1823, in Johnson v. M'Intosh⁷ the high court ruled that while the rights of the Indians to their lands were good against all third parties, those rights were maintained only at the behest of the federal government, which held ultimate title and "exclusive power to extinguish the Indian right." The tribes retained a "right of occupancy." Then in Cherokee Nation v. Georgia, the Court held that the Indian tribes were "domestic dependent nations," and that their relationship to the United States "resembles that of a ward to his guardian." 10

But having stripped the tribes of absolute political sovereignty and independent title to their lands, the Supreme Court then proceeded with equal vigor to bar the states from any control over the newly "federalized" lands occupied by the Indians. In Worcester v. Georgia 11 the Court held that the Cherokee Nation was a federal protectorate in which the laws of Georgia could "have no force, and which citizens of Georgia have no right to enter" absent Cherokee assent or an act of Congress.

In carving out this enigmatic legal niche for the Indians (subordinate to the United States but not to individual ones), the Marshall Court acknowledged from the bench what the U.S. Army had already asserted on the battlefield: ambiguous and ill-defined dominion over the continent's indigenous population. While articles of the Constitution may have alluded to the tribes as sovereign and independent nations, the political and military realities of the early 1800's no longer reflected that perspective.

Nonetheless, as demonstrated in Worcester, after presiding over

^{6.} Schmidt, Meeting in Capitol Today Will Focus on Tribal Water Claims, N.Y. Times, Dec. 8, 1982, at 16, col. 1.

^{7.} Johnson v. M'Intosh, 21 U.S. (8 Wheat.) 543 (1823).

^{8.} Id. at 587.

^{9. 30} U.S. (5 Pet.) 1 (1831).

^{10.} Id. at 17.

^{11. 31} U.S. (6 Pet.) 515, 561 (1832).

this legal diminution, the federal judges then took very seriously their new role as guardians of the wards they had created. As we shall see, the federal courts would later deflect federal legislative and executive actions—as well as those of the states—which seemed too blatantly inimical to Indian interests.

At the same time the Marshall Court was declaring Indian occupied lands inviolate, however, President Jackson and his followers in Congress succeeded in the passage of legislation mandating the removal of eastern tribes to federal territories west of the Mississippi River, and the cession of Indian lands east of the Mississippi to the states in which those lands were located. Some tribes were forcibly removed, while others went "voluntarily." In the process, tribes ceded nearly 200 million acres of farmlands and wilderness at treaty-negotiated prices ranging from one cent to one dollar per acre.

Having relocated the tribes on huge contiguous federal territories west of the Mississippi in the 1830's, a generation later Congress and the president sought to confine their range (which the tribes hadn't the martial force to control anyway) by further treaty-making. In these new agreements, Indians relinquished control over all but a fraction of their land in return for federally established and protected reservations, along with the tools and supplies necessary for tribes confined to the reservations to become self-sustaining agricultural enclaves. In the 1850's alone, over 50 such treaties were negotiated at Congress' urging, in which the tribes lost occupancy rights to an additional 174 million acres of land.¹⁴

For the hunting and gathering tribes of the Great Plains and the Southwest, the only perceived alternative to confinement on federal reservations was war against the U.S. Government. While tribes such as the Sioux and the Apaches were engaging in reciprocal massacres with the U.S. Army, Congress—in this climate of extreme hostility—began to adopt openly retributive Indian policies.

In 1871 it took the constitutionally questionable step of stripping the president of independent authority to negotiate treaties with the Indians. Then in 1887 Congress enacted legislation advocating the allotment of reservation lands to individual tribal members in 160-acre parcels, and the sale of all remaining reservation property

^{12.} F. PRUCHA, INDIAN POLICY IN THE FORMATIVE YEARS 32-33 (1962).

^{13.} P. GATES, THE FARMER'S AGE 52-53 (1960).

^{14.} S. Tyler, A History of Indian Policy 74 (1973).

^{15.} Act of Mar. 3, 1871, ch. 120, 16 Stat. 544, 566 (1871).

to non-Indians.¹⁶ Of the 156 million acres held by Indian tribes in 1881, title to roughly 90 million acres (more than half of pre-allotment holdings) had fallen into non-Indian hands by the time the allotment policy was repudiated 50 years later.¹⁷ Further, about 20 million acres of the reservation lands not allotted were unirrigated desert, considered essentially valueless by most whites.¹⁸

By the end of the 19th century there was already a well-established pattern of federal judicial insistence that the U.S. Government honor its trust obligation to the tribes on one side of the ledger, with Congress and the executive engineering the wholesale divestment of tribal land control on the other. The promises made by Congress in the removal policy of the 1830's were revoked by creation of the reservations in the third quarter of the 19th century; and the seeming inviolability of the reservations promised in the treaties which created them was finally recognized for the illusion it was when Congress urged the dissolution of Indian reservations in the Allotment Act of 1887.

Thus the tribes seeking to defend their water rights by the end of the 19th century already had over a hundred years of experience in dealing with a Congress in the habit of making promises to the Indians which it either would not or could not keep, and which was subject to radical shifts in its policy-making perspective. It is small wonder, then, that the tribes and their infrequent Anglo-American defenders looked to the federal courts to enforce the conscience of American society against its more avaricious tendencies.

II. WATER RIGHTS AND INDIAN POLICY, 1908-1976

A. Justice, Politics, and Planning in the Western United States Before the New Deal

At the end of the American Revolution the American Indian tribes were nearly as well armed as the newly created United States; they inhabited and controlled a far greater landmass; and they were recognized in the American Constitution as sovereign entities to be addressed by the federal government through the treaty-making process.

^{16.} Indian General Allotment (Dawes) Act, ch. 119, 24 Stat. 388 (1887) (codified as amended in scattered sections of 25 U.S.C.).

^{17.} S. TYLER, supra note 14, at 95-124.

^{18.} W. CANBY, AMERICAN INDIAN LAW IN A NUTSHELL 21 (1981). Mr. Canby is a judge on the U.S. Court of Appeals for the 9th Circuit.

But by the end of the nineteenth century, the tribes had been repeatedly defeated in combat by the U.S. Army, had lost all but a fraction of their land, and had been divested of title to all their remaining land holdings by the U.S. legal system. Just as seriously, tribal populations declined dramatically throughout the 1800's. From an estimated population size well in excess of one million persons when Europeans first permanently colonized North America, by 1900 the total American Indian population had fallen to just over 237,000—a decline of more than 75%.¹⁹

Now confined to remote reservations, the remaining western tribes under the leadership and control of federal Indian agents set about trying to subsist as agrarian communities—even though many of these groups were traditionally hunters and gatherers. As the reservations began to develop into viable agricultural and pastoral enclaves, however, they again came into direct conflict with white settlers over the one resource without which such an existence was impossible: water.

Since most of the reservation-creating treaties of the 1800's had not been explicit in assuring resource development rights to the Indians, it was left to the federal courts to define those rights. As early as the 1830's, the Supreme Court had begun to lay the intellectual groundwork for analysis of this problem. At that time, it articulated principles of treaty interpretation generally favorable to the tribes, in keeping with the justices' understanding of the federal government's obligation as trustee of the tribes' natural resource heritage.

In his 1832 concurrence in *Worcester v. Georgia*, ²⁰ Justice M'Lean had proposed as a rule of treaty construction that, owing to the Indians' lack of understanding of both the written word and the Anglo-American legal system, ambiguities in treaties should generally be decided in the Indians' favor. According to M'Lean,

the language used in treaties with the Indians should never be construed to their prejudice... How the words of the treaty were understood by this unlettered people, rather than their critical meaning, should form the rule of construction.²¹

The question presented to the Supreme Court in the early days of the 20th century was specifically how this principle should be applied to tribal natural resource entitlements. Were such rights guar-

^{19.} E. SPICER, A SHORT HISTORY OF THE INDIANS OF THE UNITED STATES 11 (1969).

^{20. 31} U.S. (6 Pet.) 515 (1832).

^{21.} Id. at 582 (M'Lean, J., concurring).

anteed to the tribes through the treaty-making process? In 1905 in *United States v. Winans*,²² Justice McKenna wrote for a majority of the Court that all resource development rights that the tribes had not specifically surrendered in treaties or agreements were to be considered as having been retained by the Indians. But it was the Court's landmark 1908 decision in *Winters v. United States*²³ which applied the principle explicitly to water rights, and set the agenda for a legal controversy which has continued to this day.

1. The Winters Decisions²⁴

The Great Blackfeet Reservation of 17.5 million acres was set aside for several northern plains tribes in 1855. Under extreme pressure from post-Civil War settlers and other development interests, the Gros Ventre and Assiniboin tribes finally abandoned claim to all but 600,000 acres of their land in Montana in 1887, in return for a federal promise of shelter, livestock, medical care, and farming implements.²⁵ Since Congress had unilaterally abolished treatymaking in 1871, a congressional enactment provided these goods and established the smaller reservation at Fort Belknap, Montana.²⁶

By 1890 railroad lines had penetrated the former 17 million acre reservation area, which was soon acquired by non-Indian development interests. The Fort Belknap reservation experienced its first severe water shortage in 1905, when newly arrived ranchers and farmers built diversions in the Milk River upstream from the reservation.

Convinced that the tribes at Fort Belknap would starve if unable to water their crops that summer, the reservation superintendent solicited the aid of the U.S. Attorney General's office. Perhaps partially because Theodore Roosevelt's administration was strongly urging the conservation of natural resources on federal lands, the Justice Department responded immediately to the Fort Belknap superintendent's request²⁷—hastily filing a petition in federal court for

^{22. 198} U.S. 371 (1905). A discussion of the present-day implications of the broad reserved rights doctrine first spelled out in *Winans* is in Pelcyger, *The* Winters *Doctrine* and the Greening of the Reservations, 4 J. CONTEMP. L. 19 (1977).

^{23. 207} U.S. 564 (1908).

^{24.} For a detailed account of events resulting in the Winters decisions, see Hundley, The "Winters" Decision and Indian Water Rights: A Mystery Reexamined, 13 W. HIST. Q. 17 (1982).

^{25.} Id. at 20.

^{26.} Act of May 1, 1888, ch. 213, 25 Stat. 113 (1888).

^{27.} Unfortunately, during his second term President Roosevelt also tried to incorporate parts of several western Indian reservations (about 2.5 million acres) into the national forest reserves, without tribal consent. His action was subsequently invalidated

an injunction against further non-Indian diversions from the Milk River.

In arguing on Fort Belknap's behalf, the U.S. Attorney combined elements of two opposing water rights doctrines, the common law of riparian water rights and the statutory doctrine of prior appropriation. Since Revolutionary War days, the humid eastern states had been applying the English riparian doctrine to their water rights disputes, which included the following principles: (1) title to land abutting a stream carries the right to withdraw for "reasonable use" waters from the stream; (2) the rights of all riparian owners on a watercourse are correlative, in that no user may alter water flow or quality to the degree that a neighboring riparian's use is harmed or precluded; (3) the amount of water withdrawn is not quantified, "reasonable use" and avoidance of harm to neighboring riparians being the only limitations on withdrawal; and (4) a riparian right is not lost through non-use, since the right inheres in title to riparian land.²⁸ Based on this doctrine, the attorney alleged Indian rights to the Milk River because it abutted the Fort Belknap reservation.

However, Montana and other relatively dry western states had rejected riparian doctrine, primarily because the equal sharing of waters from sparse streams with wide seasonal fluctuations in flow would not assure any one user a water supply sufficient for most agricultural or industrial uses. What therefore evolved was the doctrine of prior appropriation, in which (1) a strict hierarchy of rights is based on the chronological order in which users first began to appropriate waters from a given source (ownership of riparian land not being a prerequisite to such withdrawals); (2) the right is limited to a specific amount of water dedicated to an approved "beneficial use"; (3) non-use of an appropriative right can result in its forfeiture to other appropriators; and (4) in times of shortage the rights of users are honored in the order of their original appropriation of the waters, with the result that senior appropriators can receive their full share while junior appropriators may get little or nothing.29 Citing this doctrine, the U.S. Attorney claimed an Indian right based on the date when the reservation first diverted Milk River waters for agricultural purposes. He also alluded to "other rights"

as exceeding executive discretion, and the lands were returned. S. TYLER, supra note 14, at 105.

^{28.} Clark & Martz, Classes of Water and Character of Water Rights and Uses, in 1 WATERS AND WATER RIGHTS §§ 50, 51.1, 51.3, 51.9 (R. Clark ed. 1967 & Supp. 1978).

^{29.} Id. §§ 51.5-51.9; Hutchins, Background and Modern Developments in State Water-Rights Law, in 1 WATERS AND WATER RIGHTS, supra note 28, §§ 18.2(A), 19.2.

necessary to accomplish the ends for which the reservation was founded, but (perhaps to leave room for creative interpretation) did not specify just what these rights were.³⁰

But in granting its permanent injunction, the U.S. district court relied far less on conflicting state water rights doctrines than it did on its interpretation of the federal government's responsibility to the Indians as expressed in the Fort Belknap agreement. Although Congress had arguably abolished treaty-making seventeen years prior to enactment of the Fort Belknap reservation agreement, the federal trial court judge held that

when the Indians made the treaty granting rights to the United States, they reserved the right to use the waters of Milk River, at least to an extent reasonably necessary to irrigate their lands.³¹

The case went up on consolidated appeal as Winters v. United States,³² resulting in a unanimous Ninth Circuit affirmation of what it found to be the lower court's "true interpretation of the treaty of May 1, 1888."³³ The appellate court also determined that for the purposes of state water rights administration, the Indians were to be assigned as an appropriation date the day Congress enacted the Fort Belknap reservation legislation in 1888.³⁴

The circuit court also determined that its finding in *Winters* was not unduly violative of state water rights law, in that two years earlier the Montana Supreme Court had acknowledged that it was unnecessary for the federal government to formally appropriate unclaimed water on its reservations, as the federal government "owned it already. All it had to do was to take it and use it."³⁵

On appeal, the U.S. Supreme Court voted 8-1 to uphold both the reasoning and the findings of the lower courts.³⁶ Although it refrained from referring to the 1888 agreement as a treaty, the Court clearly articulated the principle that when the federal government creates a reservation it also by implication at that time reserves enough available water to fulfill the purposes for which the reserva-

^{30.} Hundley, supra note 24, at 24.

^{31.} United States v. Mose Anderson (9th Cir. 1906) (an unpublished district court order) (quoted at Winters v. United States, 143 F. 740, 749, final decree aff'd, 148 F. 684 (9th Cir. 1906), aff'd, 207 U.S. 564 (1908).

^{32.} Winters v. United States, 143 F. 740, final decree aff'd, 148 F. 684 (9th Cir. 1906), aff'd, 207 U.S. 564 (1908).

^{33.} Id. at 743, 749.

^{34.} Id. at 747.

^{35.} Id. at 747 (quoting Story v. Wolverton, 31 Mont. 346, 353, 589, 590 (Mont. 1904)).

^{36.} Winters v. United States, 207 U.S. 564 (1908).

tion was established. However, an important point not clarified by the Court was whether it was the tribes or the federal government acting on their behalf which retained the right (subsequent caselaw, discussed below, has tended to favor the latter interpretation).³⁷

In upholding the circuit court decision, the Supreme Court merged elements of riparian rights and prior appropriation doctrines holding (1) that in keeping with western state water rights policies, the date a reservation was established was to be considered as the date the waters were reserved (thus making Indians the senior appropriators on many western streams, since most reservations were founded in the 1850's-80's); but (2) that unlike state prior appropriation doctrine, the reserved right was not liable to extinction through non-use; and (3) that the right need not be quantified, if the appropriated waters are used to fulfill the reservation's purpose.³⁸

Given the clarity with which the Court manifested its intent to protect the Indian right, it would later prove unfortunate for all western water rights holders that the federal executive and legislative authorities responsible for western water resources development did not allow these federal court rulings to figure more prominently in their planning and decisionmaking. Honoring the Indian right played a minimal role in early federal reclamation project planning and interstate stream apportionment, and all parties concerned are now paying the price for that inattention.

2. Federal Reclamation and Interstate Apportionment

By the end of the 19th century, western water users were painfully aware of the disparity between a legal right to divert surface waters for a beneficial use, and the financial and technical ability to profitably develop that right. Many of the small private irrigation companies that had been formed to deliver water to agricultural lands in the western states went bankrupt in the depression of 1894, and it became increasingly apparent that only the federal government possessed both the technical expertise and financial resources necessary to fully exploit the surface waters of the arid states.³⁹

^{37.} For a discussion of this important point, see Hundley, supra note 24, at 29-31.

^{38.} A more detailed summary of the findings in *Winters* and their implications is in P. MAXFIELD, M. DIETERICH, & F. TRELEASE, NATURAL RESOURCES LAW ON AMERICAN INDIAN LANDS 207-38 (1977).

^{39.} Sax, Federal Reclamation Law, in 2 WATERS AND WATER RIGHTS, supra note 28, § 110.1, at 117-20.

The Reclamation Act of 1902⁴⁰ acknowledged this fact, in establishing executive authority to locate, design, and build large irrigation projects in sixteen designated western states, using federal funds. In creating what would later become the U.S. Bureau of Reclamation, the Act vested great discretionary authority in the Interior Secretary to determine the nature, size, location, and timing of projects to be built. Congress soon gained substantial control over these decisions through the appropriations process, and reclamation project planning became as much a function of political bargaining as of rational analysis.⁴¹

A significant feature of the Reclamation Act was its provision for federal compliance with state water rights law in administration of the reclamation program.⁴² This statutory section reinforced state residents in their understanding that as they appropriated waters from surface streams according to state prior appropriation doctrine, they held that right free from any superior claim of the federal government, and that the Bureau of Reclamation would file for water use before state agencies and courts, just like any other property owner. What this understanding unfortunately ignored was the theoretically senior and superior rights to much of this water held by the Indian reservations in the West, since the founding of most reservations pre-dated by far the appropriation of surface waters either by white settlers or the Bureau of Reclamation.

The conflict of interest inherent in this situation was that the Interior Department, which through its Bureau of Reclamation (BuRec) was encouraging the rapid appropriation and development of water resources by non-Indian users under state law, was also responsible through its Bureau of Indian Affairs (BIA) for protection of the Indians' reserved water rights in the federal courts. Sadly but predictably, the Interior Department was far more active and successful in discharging its former responsibility than its latter one.

Federally reserved Indian water rights were understood and honored by the federal courts, and had their infrequent defenders in the Justice Department and BIA, but had little support in BuRec and even less in Congress. Without the political power necessary to

^{40.} Reclamation Act, ch. 1093, 32 Stat. 388 (1902) (codified as amended in scattered sections of 43 U.S.C.).

^{41.} See generally P. Fradkin, A River No More—The Colorado River and the West (1981); M. Reisner, Cadillac Desert (1986).

^{42.} Reclamation Act, ch. 1093, § 8, 32 Stat. 388, 390 (1902) (codified at 43 U.S.C. § 383 (1982)).

obtain budgetary appropriations for Indian reclamation projects, the tribes were incapable of converting the *Winters* rights guaranteed them by the Supreme Court into actual beneficial use of their waters. Meanwhile, the remaining water resources were being rapidly appropriated by non-Indians, with BuRec acquiescence and support, under state law.⁴³

Periodically, however, the U.S. Attorney would rise in defense of the Indian right, and the judiciary would reaffirm it. In 1921, in Skeem v. United States,⁴⁴ the Ninth Circuit held that the Winters right was not limited to use on those lands under present cultivation on an Indian reservation, but could be expanded to include the entire land holding of a tribe. This decision also supported the ability of a tribe to lease its Winters rights in conjunction with the lease of tribal lands.

Meanwhile, the quickening pace of water project construction in the western states also led to an increase in the scope of interstate water rights litigation. The situation was particularly acute among the states comprising the Colorado River Basin, since it was feared that if the Supreme Court steadfastly applied the prior appropriation doctrine to interstate disputes, California—as the wealthiest, largest, and fastest growing basin state—could and would establish prior claims to the lion's share of the flow of the Colorado.⁴⁵

In order to avoid costly and protracted litigation which would cloud all state rights for an indeterminate period, in 1922 the seven Colorado River Basin states⁴⁶ began negotiating a compact for allocation of the river's waters among themselves. Consensus on a precise formula for allocation of the waters proved impossible to achieve, so the resulting agreement was long on general principles and short on technical detail.⁴⁷

The agreement divided the total drainage area of the Colorado into upper and lower basins at a point on the river just above the Grand Canyon; half of the annual flow was to be allocated to the

^{43.} For a more detailed summary of the historic conflicts in the Interior Department over Indian versus non-Indian access to water resources, see J. FOLK-WILLIAMS, supra note 3, at 7-8; Price & Weatherford, infra note 89.

^{44.} Skeem v. United States, 273 F. 93 (9th Cir. 1921).

^{45.} The basin states had good reason to be nervous. In Wyoming v. Colorado, 259 U.S. 419 (1922), the Supreme Court based its holding in a water rights dispute between Colorado and Wyoming on strict prior appropriation doctrine. See Meyers, The Colorado River, 19 STAN. L. REV. 1, 10 n.62 (1966).

^{46.} Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.

^{47.} The Colorado River Compact, 70 CONG. REC. 324 (1928); ratified as the Boulder Canyon Project Act, 43 U.S.C. § 6171 (1982).

upper basin states and half to the lower ones (i.e., Arizona, California, and Nevada).⁴⁸ Although the Arizona Legislature refused to approve the compact as drafted, the agreement received its constitutionally required congressional ratification in 1928.⁴⁹

Conspicuously absent at the compact negotiations (because they had not been invited) were representatives of any of the scores of tribes inhabiting the Basin, whose rights if enforced would probably constitute the largest claim on the river; nor were Indian interests represented in compact negotiations by the Bureau of Indian Affairs. In historian Norris Hundley's characterization of this and similar state-federal water use agreements, "Indians were a forgotten people in the Colorado Basin, as well as in the country at large; and their water needs, when not ignored, were considered negligible." ⁵⁰

The Supreme Court had warned western water users of the Indians' prior and superior rights in *Winans* and *Winters*, and the Ninth Circuit had clarified and reinforced the *Winters* right in *Conrad Investment Co. v. United States* ⁵¹ in 1908 and in *Skeem* ⁵² just one year prior to the drafting of the Colorado River compact. But those rights hardly figured in the final agreement. A one-sentence clause—which compact mediator Herbert Hoover jokingly referred to as his "wild Indian article"—stated that nothing in the compact was to be "construed as affecting the obligations of the United States of America to the Indian tribes." This was the compact's only allusion to tribal water rights. ⁵⁴

The federal courts may have had a clear vision of what the U.S. obligation to the tribes was, but the courts were not planning and funding reclamation projects. And as noted above, congressional and executive interpretations of the federal obligation bore little resemblance to the view from the bench.

^{48.} Subsequent complications with even this general agreement arose when it was discovered that the estimated average annual flow used in apportioning the Colorado River was erroneously high. See Weatherford & Jacoby, Impact of Energy Development on the Law of the Colorado River, 15 NAT. RESOURCES J. 171, 183 (1975) (Table 1).

^{49.} The Colorado River Compact, supra note 47.

^{50.} N. HUNDLEY, WATER AND THE WEST: THE COLORADO RIVER COMPACT AND THE POLITICS OF WATER IN THE AMERICAN WEST 80 (1975).

^{51.} A case which closely paralleled *Winters* in the 9th Circuit, Conrad Inv. Co. v. United States, 161 F. 829 (9th Cir. 1908), interpreted the same 1888 agreement as applied to other tribes. It set aside a fixed amount of water, but left the decree open to expansion as Indian needs increased.

^{52.} Skeem v. United States, 273 F. 93 (9th Cir. 1921).

^{53.} The Colorado River Compact, supra note 47, at 325.

^{54.} N. HUNDLEY, supra note 50, at 211-12.

B. Federalism and Indian Sovereignty: The Ebb and Flow of States' Rights

1. The New Deal to World War II

The willingness of Franklin D. Roosevelt and his congressional supporters to alter dramatically existing policies in the interest of economic stabilization and the public welfare had just as substantial an impact on Indian policy as on any other realm of federal endeavor. In 1928, a prestigious privately funded study revealed the disastrous social and economic effects the allotment policy was wreaking on the Indian tribes;⁵⁵ six years later, Washington was ready to follow the report's recommendations and offer the Indians their own "new deal."

This dramatic reform in Indian policy, the Indian Reorganization Act of 1934,⁵⁶ halted the practice of allotting tribal lands to individual Indians and the subsequent sale of those lands to non-Indian interests. The sale of remaining unallotted tribal lands to non-Indians was also prohibited, as was the subjection of allotted trust lands to state intestacy laws.⁵⁷

All matters regarding the use or disposition of natural resources by reservation Indians remained subject to the Interior Secretary's approval; but, the Act did empower the tribes to retain their own legal counsel (again, subject to Interior approval). Previously, the federal government had been the only entity with standing to represent tribal property interests in court.

While New Deal legislators enacted a series of measures to foster state-federal cooperation in the provision of services to Indian tribes,⁵⁸ the net effect of the Reorganization Act's repudiation of the allotment policy was to reduce greatly state influence over Indian resources. Local governments could no longer gain control of tribal lands through state tax and inheritance laws⁵⁹ and lands could no longer be given to individual tribal members and subsequently sold to non-Indians (thereby increasing the state tax base).

The federal case law on American Indian water rights during this period was mixed. In *United States v. Walker River Irrigation Dis*-

^{55.} INSTITUTE FOR GOV'T RESEARCH, THE PROBLEM OF INDIAN ADMINISTRA-TION (L. Meriam ed. 1928) (more commonly remembered as the "Meriam Report")

^{56.} Indian Reorganization Act, ch. 576, 48 Stat. 984 (1934) (current version at 25 U.S.C. §§ 461-479 (1982).

^{57.} This effectively impeded the developing "checkerboard" pattern of private non-Indian land ownership within reservation borders. W. CANBY, supra note 18, at 22-23.

^{58.} S. TYLER, supra note 14, at 129.

^{59.} W. CANBY, supra note 18, at 23-25.

trict,⁶⁰ the Ninth Circuit held that reserved water rights accompany Indian reservations created by executive order as well as by treaty or agreement with Congress, thus putting these reservations on "equal footing" with treaty and agreement-created reservations regarding the strength of their water rights claims.

But in *United States v. Powers*,⁶¹ the U.S. Supreme Court held that when a non-Indian takes title to allotted lands from an individual tribal member, some measure of the reserved water right is also transferred. Since the federal government's suit on behalf of the Indians was dismissed on a procedural technicality, however, the Court specifically declined to rule on what quantum of water is transferred to non-Indians who purchase allotted reservation lands.⁶²

2. The Eisenhower Years

Congressional action in the early 1950's represented an extreme and negative reversal of New Deal Indian policy. Just as the New Deal's Reorganization Act abruptly halted the loss of Indian lands through allotment, a practice similar to allotment was just as abruptly resumed by the Congress which came to power with Dwight Eisenhower. With Republican champions of states' rights comprising a majority in both houses, the 83rd Congress undertook a legislative program which transferred billions of dollars worth of federally controlled natural resources to state and private ownership, and dealt near fatal blows to the concept of Indian sovereignty.

In the area of water rights, even before President Eisenhower's election, western Congress members were highly irritated with positions taken by the federal executive in natural resource disputes with the states. For in state-federal water rights litigation the Justice Department had regularly used the sovereign immunity defense to preclude quantification of federal water rights in (assumedly unsympathetic) state courts.

During the last year of the Truman Administration, the 82nd Congress put a stop to this practice through passage of the McCarran Amendment⁶³ to the Reclamation Act.⁶⁴ In this amendment,

^{60. 104} F. 2d 334 (9th Cir. 1939).

^{61. 305} U.S. 527 (1939).

^{62.} Id. at 533.

^{63. 43} U.S.C. § 666 (1982).

^{64.} Reclamation Act, ch. 1093, 32 Stat. 388 (1902) (codified as amended in scattered sections of 43 U.S.C.).

Congress waived federal sovereign immunity in certain types of water rights cases, permitting the U.S. Government to be joined in general stream adjudication proceedings in state tribunals.⁶⁵ As discussed below, this was to have profound implications for the defense of Indian water rights.

The federal government and several coastal states had also been wrangling for years over title to submerged lands along the nation's shores. In 1950 the federal claims prevailed in the U.S. Supreme Court, 66 and just before leaving office President Truman declared the entire continental shelf to be a Naval Petroleum Reserve. 67 In response, an early action of the 83rd Congress in 1953 was legislation cancelling President Truman's order, and giving all submerged lands from the coastline three miles seaward to the respective coastal states. 68 Also enacted in that year was most of the current statutory arrangement for leasing federal submerged lands seaward of the three-mile limit to private mineral developers. 69

Having freed offshore petroleum and natural gas reserves for private development, the 83rd Congress now turned its attention to Indian lands. Two major pieces of legislation, both enacted fairly early in the first session, formed the core of a new Indian policy. The first was a resolution⁷⁰ establishing procedures for the future legislative "termination" of Indian reservations; that is, the cessation of all federal trust responsibility for and supervision of reservation lands. Under this new program, the tribes in "terminated" reservations (1) became subject to state criminal and civil jurisdiction, as well as state property taxes; (2) were cut off from all federal health, education, welfare, and employment assistance; and (3) in cases where all their lands were sold to non-Indians, experienced a total loss of sovereignty as a governmental entity.⁷¹

^{65.} Unlike a private dispute over water quantity or quality between two parties, a general stream adjudication under a state prior appropriation system is a consolidated action mandated by state statute, in which all appropriators in a given watershed are called upon to come forth in an administrative or judicial proceeding with proof of their date of appropriation and subsequent use of a specific quantity of water for a specified beneficial use or uses. The intent of such a consolidated action is to avoid the endless private litigation of rights on a stream among various users. Clyde, General Adjudication Proceedings, in 6 WATERS AND WATER RIGHTS, supra note 28, §§ 530-532.

^{66.} See 1 Envtl. L. Rep. (Envtl. L. Inst.) 50001, 50031 n.378.

^{67.} Exec. Order No. 10,426, 18 Fed. Reg. 405 (1953).

^{68. 43} U.S.C. §§ 1301-1305, 1311-1315 (1982).

^{69.} Id. §§ 1331-1343.

^{70.} H.R. Con. Res. 108, 83d Cong., 1st Sess., 67 Stat. B132 (1953).

^{71.} For a discussion of the intent, content, and impact of this policy, see Wilkinson & Biggs, The Evolution of the Termination Policy, 5 AM. INDIAN L. REV. 139 (1977).

Some of the termination acts passed under the House Concurrent Resolution 108 guidelines arranged for entire reservations to be appraised and sold to the highest bidder, with the proceeds distributed to the tribe. A total of 109 bands and tribes were "terminated" during the life of this program, involving a loss of about 1.4 million acres of tribal land.⁷²

A companion act to the termination program in the 83rd Congress was Public Law 280,73 which extended state criminal and civil jurisdiction to all Indian lands in five states (California, Minnesota, Nebraska, Oregon, and Wisconsin) whether or not the reservations were being terminated, and made provision for such extensions in any other reservation-bearing state requesting such authority. Tribal consent was not required. Thus, 130 years after the Supreme Court's finding in *Worcester v. Georgia* that an Indian reservation was a land in which state law "can have no force," Congress openly nullified its decision.

Again, during this era the federal courts moved to defend Indian rights while Congress was in the process of decimating them. The major Indian water rights case decided during the Eisenhower Administration was *United States v. Ahtanum Irrigation District*,⁷⁴ in which the 9th Circuit restated and enlarged upon its finding 35 years earlier in *Skeem*,⁷⁵ pointing out once more that the Indians' federally reserved water rights need not be fixed in quantity, but may expand with the needs of the tribe. The U.S. Supreme Court denied an immediate appeal from the Ninth Circuit's decision.⁷⁶

In a now familiar pattern, the federal courts continued to honor the historic U.S. obligation to the tribes as semi-sovereign peoples by upholding the water rights on which the continued existence and development of the reservations depended while the Congress was simultaneously working to dissolve the tribes and sell off their lands. Meanwhile, the executive branch continued to play its somewhat schizophrenic role of actively facilitating non-Indian western water resources appropriations under state laws (via reclamation projects) on the one hand, while occasionally defending the Indian reserved water right in federal court on the other.

^{72.} Id. at 151-54.

^{73.} Act of Aug. 15, 1953, Pub. L. No. 83-280, 67 Stat. 588 (codified as amended in scattered sections of 18, 25, and 28 U.S.C.).

^{74. 236} F.2d 321 (9th Cir. 1956), cert. denied, 352 U.S. 988 (1957).

^{75.} Skeem v. United States, 273 F. 93 (9th Cir. 1921).

^{76.} United States v. Ahtanum Irrigation Dist., 236 F.2d 321 (9th Cir. 1956), cert. denied, 352 U.S. 988 (1957).

- 3. The Civil Rights Era (ca. 1960-75)
- a. Winters Doctrine Rights and the Colorado River Compact

Several commentators⁷⁷ have observed that the 1922 Colorado River Compact was so general because its signatories could agree on so little. The lower basin states' principal area of disagreement was over the formula for apportioning the river's annual flow.

Failing to come to terms over this issue, Arizona sued California in 1931 to have the compact overturned. Unsuccessful in this effort, in 1934 Arizona called out its National Guard to prohibit by military force the construction of projects to divert California's share of the Colorado. Arizona finally signed the Compact in 1944 and contracted with BuRec for the delivery of its share of the river, but initiated another suit in 1951 to establish a final apportionment of the Colorado in order to facilitate Congressional authorization of the Central Arizona Project.⁷⁸

When the Supreme Court finally rendered its decision in Arizona v. California 79 in 1963 (more than 30 years after Arizona had filed its first action), states' rights advocates learned that Colorado River compact negotiators had ignored the Indian rights at the states' peril. The U.S. Government had defended the rights of five lower basin tribes living along the main stem of the Colorado between Hoover Dam and the Mexican border. In response, Justice Black's majority opinion awarded the tribes (which collectively numbered fewer than 3,500 persons)80 more than 10% of the entire annual lower basin share of the Colorado River (about three times the amount granted to Nevada).

Further, the Indians' portion of the annual flow was to be subtracted from the allotments to the states in which the various reservations were located. Thus, the states containing the most expansive reservations suffered the greatest loss in their apportionment.

The Court also chose to quantify the *Winters* rights in this case, reserving enough water to service all "practicably irrigable acreage" on the reservations.⁸¹ In a resounding reaffirmation of the doctrine

^{77.} E.g., Meyers, supra note 45; N. HUNDLEY, supra note 50.

^{78.} The colorful history of the Arizona-California water wars, in and out of court, is reviewed in N. HUNDLEY, supra note 50; Meyers, supra note 45, at 37 n.162.

^{79. 373} U.S. 546 (1963).

^{80.} Shrago, Emerging Indian Water Rights: An Analysis of Recent Judicial and Legislative Developments, 26 ROCKY MTN. MIN. L. INST. 1105, 1114 n.36.

^{81.} This distributive criterion had been suggested in the findings of the Special Master, whose report formed the basis of (and in some areas, the points of departure

it had articulated half a century earlier, the Supreme Court again let it be known that the creation of Indian reservations also created substantial and (in most cases) superior Indian rights to appurtenant water resources.

b. More Changes in Congress

This supportive stance of the Warren Court presaged another change of heart in Congress over Indian policy. Just as Congress had begun to follow the Court's lead in the early 1960's on matters affecting the status of other traditionally disenfranchised groups, it once again overhauled federal relations with the tribes.

The earliest example of this change of heart was Congress' refusal to pass any more reservation termination bills after 1962.⁸² But the most striking restatement of policy occurred when the 91st Congress produced the Indian Civil Rights Act of 1968.⁸³

While this legislation may be seen in one light as a continued limitation on Indian sovereignty (since it imposed 14th Amendment restraints on tribal governments), it also effectively halted broader implementation of Public Law 280,⁸⁴ by denying states not already having done so the authority to extend their civil and criminal jurisdiction over Indian lands without tribal consent. By the late 1960's, then, the accretion of state control over Indian lands had ended, and the flow of power was once again toward Washington. By the early 1970's, some tribes had actually convinced Congress to repeal the statutes terminating their reservations, and to resume federal trust responsibility for their remaining lands.⁸⁵

c. Reserved Rights at the Bargaining Table: the Navajo Indian Irrigation Project

The federal government's advocacy of Indian water rights before the Special Master in Arizona v. California (and the findings in his report) made it apparent that the Winters doctrine had become a force to be reckoned with in all future western water resources planning. Those proceedings had an immediate impact on negotiations

for) the Supreme Court's decision. Simon H. Rifkind, Report of the Special Master, Arizona v. California 54, 265 (1960).

^{82.} See S. TYLER, supra note 14.

^{83. 25} U.S.C. §§ 1301-1303, 1311, 1312, 1321-1326, 1331, 1341 (1982).

^{84.} Act of Aug. 15, 1953, Pub. L. No. 83-280, 67 Stat. 588 (codified as amended in scattered sections of 18, 25 and 28 U.S.C.).

^{85.} E.g., Menominee Restoration Act, Pub. L. No. 93-197, 87 Stat. 770 (1973) (codified at 25 U.S.C. §§ 903-903f (1982)).

in progress over a proposal to construct an irrigation project on the Navajo Indian Reservation.

The project under consideration would divert water from the San Juan River (a tributary of the Colorado) for the irrigation of Navajo lands near Shiprock, New Mexico. Federal agencies had considered the proposal in one form or another since the late 1940's, when the upper basin states negotiated their own compact for apportionment of the upstream share of the Colorado River.⁸⁶

Federal representatives at the upper basin compact negotiations in 1948 had suggested that the Navajo could reasonably lay claim to an annual flow of about 787,000 acre-feet⁸⁷ of water from the San Juan for irrigation purposes.⁸⁸ A reclamation plan prepared soon thereafter at the Navajo Tribe's request by the BIA and BuRec called for project development of this approximate scope, but the upper basin states refused to support congressional authorization because of concerns that their own claims to the San Juan might be impaired.⁸⁹

It was evident that the upper basin states' approval of the Navajo Indian Irrigation Project would be forthcoming only if the tribe agreed to limit and define its rights to the San Juan. So finally, at about the same time as the Special Master's report in Arizona v. California, the Navajo Tribe and congressional representatives of the upper basin states struck a bargain.

First, New Mexico agreed to support the Navajo proposal if its authorizing legislation provided for the construction of a companion project, to divert water out of the San Juan and into the greater Rio Grande watershed for non-Indian use within New Mexico. Second, to allay the upper basin states' fears of a continuing, openended Indian reserved rights claim on the river, the Navajo Tribal Council agreed to waive its Winters rights to the San Juan in return for the guaranteed delivery of 508,000 acre-feet of water annually through its proposed project. The Council also agreed to share water shortages during dry years with other San Juan water users, rather than assert senior rights during drought years based on the

^{86.} Upper Colorado River Basin Compact, ratified as Act of April 6, 1949, ch. 48, 63 Stat. 31.

^{87.} An agricultural measurement, an acre-foot of water is enough to cover a level acre of ground to a depth of one foot—about 326,000 gallons. W. VIESSMAN & C. WELTY, WATER MANAGEMENT—TECHNOLOGY AND INSTITUTIONS 589 (1985).

^{88.} P. Frankin, supra note 41, at 167.

^{89.} Price & Weatherford, Indian Water Rights in Theory and Practice: Navajo Experience in the Colorado River Basin, 40 LAW & CONTEMP. PROBS. 97 (1976).

1868 founding date of the Navajo Reservation.⁹⁰ Congress enacted authorizing legislation embodying this agreement in 1962.⁹¹

But congressional authorization is only the first step toward project realization. Next must come appropriations—the annual process by which Congress actually diverts funds from the federal treasury into project construction. Although the Navajo Indian Irrigation Project (NIIP) and New Mexico's San Juan-Chama project were authorized by the same act, funds for the two were appropriated at vastly different rates. Eight years after authorization, NIIP was only 17% completed, while the San Juan-Chama project was about two-thirds of the way to completion.⁹²

What happened during this interim period was a reassessment of project design and technology. The Interior Department discovered that use of a sprinkler irrigation system rather than a gravity flow system would irrigate the same amount of Navajo land as originally planned with 370,000 acre-feet of water, instead of the 508,000 acre-feet written into the legislation authorizing the project. Following this technical report the Interior Department then issued a legal opinion⁹³ stating that the Navajo were entitled only to enough water to irrigate the amount of *land* mentioned in the NIIP legislation, and not to the specific amount of *water* cited in that Congressional enactment. In effect, Interior Department lawyers were saying that the Bureau of Reclamation was obligated to deliver only 370,000 acre-feet of water annually through the project.

Then in 1975, in response to an unquantified *Winters* doctrine claim on the San Juan River by the Jicarilla Apaches, New Mexico filed for an adjudication of *all* rights (Indian and non-Indian alike) to the New Mexico segment of the San Juan in its own state courts.⁹⁴ Efforts to remove the case to federal court were ultimately unsuccessful.⁹⁵

This and other examples of negotiated settlements of Winters doctrine rights earlier in the Southwest bear a striking resemblance

^{90.} Navajo Tribal Council, Resolution No. CD 86-57 (Dec. 12, 1957), cited in Price & Weatherford, id. at 122 n.99.

^{91.} Act of June 13, 1962, Pub. L. No. 87-483, 76 Stat. 96, as amended, 43 U.S.C. §§ 615ii-615zz (1982).

^{92.} Hearings on H.R. 17619 Before a Subcomm. of the Senate Comm. on Appropriations, 91st Cong., 2d Sess. 2021 (1970) (statement of Charles Corker).

^{93.} Memorandum from David E. Lindgren, Deputy Solicitor, to John C. Whittaker, Undersecretary of the Interior, *Navajo Indian Irrigation—Water Entitlement of Navajo Tribe* (Dec. 6, 1974), cited in Price & Weatherford, supra note 89, at 98.

^{94.} New Mexico ex rel. Reynolds, State Engineer v. United States, No. 75-184 (N.M. Dist. Ct. for County of San Juan filed Mar. 13, 1975).

^{95.} J. FOLK-WILLIAMS, supra note 3, at 72.

to 19th century negotiations over the establishment of reservations in the western territories. Then tribes such as the Assiniboin and Blackfeet forfeited rights to millions of acres of land in return for the promise of federal assistance in the economic development of much smaller protected areas—only to see those promises dissolve like a mirage in an Arizona summer.

Similarly, the Navajo waived their reserved rights to the San Juan—which the federal government itself estimated in 1948 to be at least 787,000 acre-feet—in return for the "guaranteed" delivery of 508,000 acre-feet (as authorized in the NIIP legislation), only to see this amount unilaterally adjusted downward to 370,000 acre-feet by the Interior Department in 1974. To top it all off, the Navajo were then called upon to defend their remaining rights in New Mexico's own courts. The strength of this historical analogy (that is, the pitfalls involved in negotiating resource entitlement) has not been lost on Indian leaders, some of whom have now vowed "never again to discuss water rights outside the courthouse"—preferably the federal one.96

III. CURRENT ISSUES AND RECENT CASES

So far, evidence has been provided to support three generalizations on the legal history of American Indian water resources. First, until 1976, the federal courts have tended to steadfastly uphold Indian water rights as preemptive federal obligations (expressed primarily in the formulation and subsequent interpretation of the *Winters* doctrine), while Congress and the executive branch—because of the Indians' relative lack of political clout—have tended to either ignore Indian rights or to indirectly subvert them, by facilitating non-Indian water appropriation under state laws. Infrequently, the executive branch has defended Indian water rights, in keeping with its formal obligation.

Second, at times when Congress has been most deferential to the states and private developers regarding access to federally protected natural resources, diminution of the Indian resource base has been the greatest, as in the Removal Act, the Allotment Act, the termination acts, and Public Law 280.

And third, a strong parallel exists between negotiations over the creation of Indian reservations in the 19th century and negotiations over the development of Indian water resources at present. In both

^{96.} P. FRADKIN, supra note 41, at 173.

instances, the tribes have been urged to relinquish resource rights for which the federal judiciary had afforded strong constitutional protections in return for congressional and executive promises of assistance in the economic development of a much smaller resource base, which grew even smaller once the original right had been bargained away.

As the governmental institution ostensibly least susceptible to shifting political currents and most sensitive to the honoring of governmental obligations, the federal judiciary has emerged over the course of this century as the primary definer and defender of the Indian water right. Congress has been called upon time and again to declare a general policy on these rights, but it has resolutely avoided action on any of the dozens of proposals it has considered.⁹⁷

Since the federal courts stand at the vortex in this swirl of ambivalence and uncertainty, any perceptible shift in their support for the Indian right will profoundly affect the future of that entitlement. The courts' views on federal-state relations and on the nature and extent of the U.S. obligation to the tribes are of special relevance. Therefore, this review of issues and cases points out that as the Supreme Court has become more accommodative of states' rights in the last decade or so, it has created even greater uncertainty over the future of Indian water resource entitlement than existed previously; some recent decisions have substantially damaged Indian claims.

Principal cases since 1975 in the Supreme and Circuit Courts are discussed below in terms of the as-yet unresolved issues they raise. These issues, which form the core of contemporary Indian water rights disputes, include the following questions: (1) which court system (state or federal) should have primary jurisdiction over Indian water rights cases; (2) how much water is reserved for tribal use; (3) to what uses may these waters be devoted; (4) what water right interests may be conveyed to non-Indians; (5) what is the extent of tribal authority and responsibility over water resource management and water quality; and (6) who is authorized to represent Indian water rights interests?

A. Jurisdiction to Adjudicate Indian Water Rights

Although Congress agreed to subject the quantification of federal

^{97.} See Note, Indian Reserved Water Rights: the Winters of Our Discontent, 88 YALE L.J. 1689, 1702-04 (1979).

water rights to general stream adjudication in state tribunals in the 1952 McCarran Amendment, 98 it was not until 1976 that the U.S. Supreme Court was called upon to determine whether this provision also included the water rights of Indian tribes. Up until that time, it was so settled a proposition that Indian water rights cases would be heard in federal courts that the question of jurisdiction over Indian water resources disputes had not even appeared in treatises summarizing Indian rights.99

But in a 1976 case, Colorado River Water Conservation District v. United States 100 (also known as the Akins decision), the Supreme Court declared that certain states did have jurisdiction to quantify the Indian entitlement. The Court held that a "general stream adjudication" such as that being conducted under Colorado law was just the sort of unified proceeding in which the McCarran Amendment compelled the federal government to participate. Since the federal government was acting as trustee of the Indian interests, Indian rights were subject to quantification in state proceedings. The Supreme Court did reserve concurrent federal court jurisdiction in future cases, however, and left open the question of a tribe's ability to perfect its rights in an original federal court action in the absence of a state proceeding.

This was a substantial setback for Indian rights. Judges in several of the western states are elected by popular vote (some with party affiliation), and periodically stand for re-election. And members of the state boards which make initial findings of fact in stream adjudications in some states are usually appointed by the governor, subject to legislative consent. With this degree of local political control over water rights adjudication, Indian concerns about fairness and objectivity are understandable.¹⁰¹

The issue was further clouded by subsequent conflicting decisions in the circuit courts. These cases (discussed below) all interpreted language in the congressional enactments which admitted several of

^{98. 43} U.S.C. § 666 (1982).

^{99.} E.g., Clyde, Indian Water Rights, in 2 WATERS AND WATER RIGHTS, supra note 28, at 373-99.

^{100. 424} U.S. 800 (1976).

^{101.} For a much more detailed discussion of the generally antagonistic relationship between many of the western states and their neighboring Indian reservations, as well as the extreme Indian mistrust of state adjudication, see Pelcyger, Indian Water Rights: Some Emerging Frontiers, 21 ROCKY MTN. MIN. L. INST. 743 (1976). Specific comments on the negative impact of an elected state judiciary on Indian interests are in Corker, A Real Live Problem or Two for the Waning Energies of Frank J. Trelease, 54 DEN. L. J. 499, 500 (1977).

the western states to the Union or language in the constitutions originally drafted by these states. Provisions in these acts and constitutions waived any and all state claims to the ownership of or regulatory jurisdiction over Indian lands within those states, in return for the grant of statehood.¹⁰²

In 1979, in *Jicarilla Apache Tribe v. United States*, ¹⁰³ the tribe sought to avoid state water rights adjudications on the basis of such provisions. The Tenth Circuit rejected the tribe's argument, finding that the McCarran Amendment and the Supreme Court's interpretation of it in the 1976 *Akin* decision¹⁰⁴ authorized state adjudication of the Indian right.

But the Ninth Circuit then heard three cases raising precisely the same issue, and it reached conclusions diametrically opposed to the Tenth Circuit finding in all of them. In Northern Cheyenne Tribe v. Adsit, 105 the Ninth Circuit explicitly rejected the reasoning in Jicarilla, and found instead that states constitutionally disclaiming jurisdiction over Indian lands were barred from adjudicating Indian water rights. Likewise, in San Carlos Apache Tribe v. Arizona 106 and Navajo Nation v. United States 107 the immunity of Indian reservations from water rights adjudication in states with disclaimer provisions was upheld.

The U.S. Supreme Court heard all of these cases on consolidated appeal, and in July of 1983 rendered a decision substantially reiterating the position it took in *Akins*: Indians named in state general stream adjudications would be compelled to participate in those proceedings for the purpose of quantifying their entitlement. The federal courts would retain concurrent jurisdiction to review state adjudicatory outcomes.¹⁰⁸

However, the Court did list three narrow exceptions to its state adjudication ruling. It held that a federal action could be maintained if (1) a state government voluntarily stays assertion of juris-

^{102.} The jurisdictional waiver language in several of these congressional acts and state constitutions is cited in Hostyk, Who Controls the Water? The Emerging Balance Among Federal, State, and Indian Jurisdictional Claims and Its Impact on Energy Development in the Upper Colorado and Upper Missouri River Basins, 18 TULSA L.J. 1, 55 n.300 (1982).

^{103. 601} F.2d 1116 (10th Cir.), cert. denied, 444 U.S. 995 (1979).

^{104. 424} U.S. 800 (1976).

^{105. 668} F.2d 1080 (9th Cir. 1982), rev'd sub nom. Arizona v. San Carlos Apache Tribe, 463 U.S. 545 (1983).

^{106. 668} F.2d 1093 (9th Cir. 1982), rev'd, 463 U.S. 545 (1983).

^{107. 668} F.2d 1100 (9th Cir. 1982), rev'd sub nom. Arizona v. San Carlos Apache Tribe, 463 U.S. 545 (1983).

^{108.} Arizona v. San Carlos Apache Tribe, 463 U.S. 545 (1983).

diction, (2) if the arguments for and against dismissal of the federal case are "closely matched," and (3) if the federal action is already so far advanced that removal to a state tribunal would be duplicative and wasteful of judicial resources. ¹⁰⁹ Citing all three of these exceptions, in 1983 the Ninth Circuit denied an appeal by the State of Oregon from a lower court decision barring the state from adjudicating the water rights of the Klamath Indians. ¹¹⁰

Since then the Ninth Circuit has again marginally trimmed the states' jurisdictional victory in the San Carlos decision, by holding that the federal courts maintain current control over implementation of historic consent decrees involving Indian rights—decrees entered before passage of the McCarran Amendment in 1952.¹¹¹ Such federal jurisdiction, according to the Ninth Circuit ruling, remains in force even against subsequent attempted state adjudication of those rights conducted in accordance with the McCarran Amendment and the Akin and San Carlos decisions.

But at the Supreme Court level, how can the Akin and San Carlos decisions be reconciled with the observation earlier in this article that one of the federal court system's traditional functions has been to shield the tribes from state jurisdictional intrusions, absent explicit congressional instructions to the contrary? The answer lies mostly in the changing composition and orientation of the Supreme Court. It appears that the more deferential an individual justice tends to be toward the traditional powers of state government, the more likely he or she will be to vote in favor of the states and against the Indians whenever a jurisdictional conflict between the two occurs. And just as the Court has become markedly more states' rights-oriented over the last few years beginning with the appointment of Justices Burger and Rehnquist, so has it become correspondingly less supportive of the Indians in jurisdictional disputes; since 1970 the Indians have lost five of the six water rights cases to come before the Court-mostly on jurisdictional grounds.112

Paradoxically, in the same year the Akins decision was handed

^{109.} Id. at 569.

^{110.} United States v. Adair, 723 F.2d 1394 (9th Cir. 1983), cert. denied, 467 U.S. 1252 (1984).

^{111.} Kittitas Reclamation Dist. v. Sunnyside Valley Irrigation Dist., 763 F.2d 1032 (9th Cir.), cert. denied 474 U.S. 1032 (1985).

^{112.} Colorado River Water Conservation Dist. v. United States, 424 U.S. 800 (1976); Arizona v. California, 460 U.S. 605 (1983); Montana v. United States, 450 U.S. 544 (1981); Pyramid Lake Paiute Tribe v. Truckee-Carson Irrigation Dist., 463 U.S. 110 (1983); Arizona v. San Carlos Apache Tribe, 463 U.S. 545 (1983).

down (1976), the Supreme Court also upheld federal jurisdiction over the adjudication of groundwater disputes involving federal property. In *Cappaert v. United States*,¹¹³ the Court for the first time extended federal reserved rights to groundwater whenever a "hydrological connection" between surface and groundwaters can be shown. The federal property at issue in this case was a national monument, in which surface waters were being depleted by groundwater pumping on adjacent private property. In the years since this decision was rendered, the Court has never specifically ruled whether *Cappaert* also applies to Indian reservations.

B. Quantity of Water Reserved

The Winters decision and most of its early progeny held that the Indians' reserved right should not be quantified, enabling the entitlement to expand with tribal needs. But as competition for the resource has increased a more recent trend has been toward placing an outside limit on the precise quantity of water subject to Indian claims. In Walker River, 114 the Ninth Circuit in 1939 experimented with quantification based on the "reasonably forseeable needs" of the tribe, but the quantification criterion most frequently discussed at present is the "practicably irrigable acreage" test proposed by the special master and adopted by the Supreme Court in Arizona v. California in 1963.115

While the use of this criterion proved to be relatively generous to the Indians in Arizona v. California, there are potential pitfalls involved in its future use to resolve the claims of other tribes. First, when Arizona v. California was recently reopened to adjudicate additional Indian claims, the new special master made it clear that determining what lands were "practicably irrigable" for the purposes of Indian water rights quantification would be accomplished through the use of classic cost-benefit analysis. 116 Analysts familiar with the use and misuse of this technique in water project evaluation have been quick to point out that in the hands of an untrained or hostile fact-finder, an Indian right could be quantified at drastically reduced levels through a failure to distinguish between ecofinancial feasibility, an insufficiently and consideration of costs and benefits, or the choice of an inappropriate

^{113. 426} U.S. 128 (1976).

^{114. 104} F.2d 334 (9th Cir. 1939).

^{115. 373} U.S. 546 (1963).

^{116.} In the Supreme Court of the United States, October Term, 1982, Report of Elbert P. Tuttle, Special Master, Feb. 22, 1982, at 100.

discount rate.117

Even using this analysis, the Special Master found that additional allocations to lower Colorado River Basin tribes were in order. However, in March of 1983 the U.S. Supreme Court rejected the master's report and refused to grant the tribes more water—not because of faulty methodology, but because they did not wish to rehear the quantification issue.¹¹⁸

In addition, while the practicably irrigable acreage test may work to the advantage of tribes inhabiting alluvial plains or other relatively flat lands adjacent to a watercourse, forest and mountaindwelling tribes are severely penalized by such a criterion, since agriculture will never have the primacy in their economies that timber, minerals development, or recreation might attain, given an adequate water supply. In these situations, some more appropriate quantification criterion must be developed, if quantification is attempted at all.

Some tribes are now beginning to assert an "aboriginal" water right, based on use of the resource from "time immemorial" rather than on reservation of the water by the federal government at the time an Indian reservation was created by treaty, agreement, or executive order. The aboriginal right has been partially recognized in at least one federal case, 120 but if quantified, an aboriginal right claimed by a traditionally agricultural tribe might be smaller than a Winters doctrine claim (if the tribe had not been utilizing all practicably irrigable acreage), and might also be more susceptible to state regulation (not bearing the protective mantle of explicit federal reservation). 121

C. Uses of Reserved Waters

The essential theme of the Winters doctrine is that on the date federal land is reserved, there is also reserved enough previously unappropriated water to fulfill the purpose(s) for which the reservation was created. In defining an Indian reserved right, determining

^{117.} Burness, The "New" Arizona v. California: Practicably Irrigable Acreage and Economic Feasibility, 22 NAT. RESOURCES J. 517 (1982).

^{118.} Arizona v. California, 460 U.S. 605 (1983).

^{119.} P. MAXFIELD, M. DIETERICH & F. TRELEASE, supra note 38, at 229.

^{120.} New Mexico v. Aamodt, 537 F.2d 1102 (10th Cir. 1976), cert. denied, 429 U.S. 1121 (1977).

^{121.} See Merrill, Aboriginal Water Rights, 20 NAT. RESOURCES J. 45 (1980). See also Ross, Aboriginal Water Use and Water Law in the Southwestern United States: Why the Reserved Rights Doctrine was Inappropriate, 9 Am. Indian L. Rev. 195 (1983).

why an Indian reservation was created is a necessary first step in identifying the specific purposes for which water is reserved and estimating the amount of water necessary to fulfill those purposes. Critics of expansive *Winters* doctrine claims assert that since the intent of 19th century treaties was to encourage the tribes (particularly in the Plains area) to convert from hunting and gathering to an agricultural economy, agricultural production should be the only use to which a reserved water right can be devoted.¹²²

Regarding non-Indian federal reserved water rights, the Supreme Court in the late 1970's did indeed adopt a progressively narrower definition of the purposes of federal reservations such as national forests, 123 in an effort to minimize the impact of federal claims on state systems of water rights allocation. But in a 1979 per curiam supplemental decree in Arizona v. California, 124 the Court stated that even though "practicably irrigable acreage" was the criterion for quantifying the Indian right, and agricultural development was among the primary purposes of the reservations concerned, the tribes were not restricted in the use of their waters to irrigation or other agricultural applications. 125

Since the general purposes stated in creating nearly all Indian reservations included assistance to the tribes in learning the "arts of civilization" and otherwise becoming economically self-sustaining, analysts for minerals developers have concluded that the courts probably will construe activities such as lumbering, energy resource extraction and processing, and recreation as among the legitimate uses to which tribes can devote water resources acquired under the Winters doctrine. ¹²⁶ But since efficiency of use is a continuing concern in the West, there will no doubt also be continued controversy over what technologies the tribes use to apply their waters to these purposes, since method of use affects quantities needed.

A recent case in the Ninth Circuit exemplifies the interrelationship of the quantity reserved and purpose-of-use issues. In Colville

^{122.} This viewpoint is articulated in Shrago, supra note 80, at 1110-12.

^{123.} United States v. New Mexico, 438 U.S. 696 (1978). In the most restrictive reserved water rights decision from the federal standpoint, Justice Rehnquist wrote for a 5-4 majority that if the U.S. Forest Service wished to reserve waters in the Gila National Forest using as an appropriation date the 1899 act which created it, water could be reserved *only* for the purposes stated in the 1899 legislation—not for the fulfillment of subsequent Forest Service responsibilities in the Gila. The majority then proceeded to construe the purposes of the enabling act quite narrowly. *See* Shrago, *supra* note 80, at 1126.

^{124. 439} U.S. 419 (1979).

^{125.} Id. at 422.

^{126.} P. MAXFIELD, M. DIETERICH & F. TRELEASE, supra note 38, at 218-33.

Confederated Tribes v. Walton, 127 the Indians appealed a federal district court decision denying them reserved rights to the minimum instream flow necessary to restore spawning grounds for a fishery appurtenant to their reservation in the State of Washington. The trial court had reasoned that since the Indians were being supplied with artificially propagated fish from a federal hatchery, an instream flow sufficient to support natural propagation was not necessary to fulfillment of the purposes of the reservation. 128

The Ninth Circuit disagreed and found that the obligation of the U.S. Government was to guarantee the tribes sufficient water to allow *them* to achieve their reservation's purposes rather than simply to meet the Indians' economic needs by other means.¹²⁹ The *Walton* decision also represented an important statement of support for tribal self-determination in resource management.

D. Sale of Reserved Waters to Non-Indian Users

This question bears on the preceding issue of the allowable uses of reserved waters. Indian advocates assert that there should be no restrictions on their freedom to sell water to any interested buyers. Critics of a market approach charge that water marketing is nowhere mentioned as a purpose for which any Indian reservation was created, and that Indian tribes therefore should not be allowed to use the *Winters* doctrine first to take water away from their non-Indian neighbors, and then sell it back to them.

Neither Congress nor the courts have made a definitive ruling on all Indian tribes' right to sell water they gain control of through the *Winters* doctrine. In settling a groundwater dispute between the Papago Tribe (now the Tohono O'odham) and its Tucson-area neighbors, Congress both authorized the Papagos to sell water if they wished to, and disclaimed extension of that permission to other tribes.¹³⁰

Another source of contention has been the breadth of the reserved water right acquired by a non-Indian successor to tribal lands which passed out of Indian control during the Allotment era (i.e., non-Indian lands wholly within or adjacent to reservation boundaries, which carry a reserved water right). The early case law

^{127. 647} F.2d 42 (9th Cir.), cert. denied, 454 U.S. 1092 (1981).

^{128.} Colville Confederated Tribes v. Walton, 460 F. Supp. 1320 (E.D. Wash. 1978), 647 F.2d 42 (9th Cir.), cert. denied, 454 U.S. 1092 (1981).

^{129. 647} F.2d at 48.

^{130.} Southern Arizona Water Rights Settlement Act of 1982, Pub. L. No. 97-293, §§ 306(c)(2), (d), 96 Stat. 1274, 1280.

on this issue was relatively generous to the non-Indian successors to title, ruling that they do indeed share in the tribe's reserved rights, 131 although not to the same unquantified extent. 132

But in 1981, the Ninth Circuit clarified and slightly reduced the scope of the non-Indian reserved rights claim. In Colville Confederated Tribes v. Walton 133 the court held that while non-Indians do take a reserved water right in allotted lands, with the founding of the reservation as the appropriation date, they appropriate only that amount of water actually being put to "diligent use" at the time of succession to title. In no instance, however, is the quantum to exceed that amount necessary to service the "practicably irrigable acreage" of the non-Indian lands.

E. Tribal Sovereignty, Water Resource Management, and Water Quality Control

As American Indian tribes become more insistent on controlling in fact water resources the *Winters* doctrine had formerly granted them only in theory, more attention is being drawn to the question of how responsibly and effectively the tribes can manage more water if they are awarded it. The Ninth Circuit ruled in 1981 that it is within the power of a tribal government—not the states—to regulate water rights on private lands owned by non-Indians within reservation borders. The court characterized tribal authority to adopt and enforce its own water codes as an "important sovereign power," unabridged by the McCarran Amendment.¹³⁴

In keeping with this ruling, the Interior Department in the same year published tribal guidelines for adopting water codes and otherwise assuming broader management authority.¹³⁵ But as of 1986, the Department had refused to endorse the enforcement of any of these codes as official federal policy; the issue is a highly controversial one at the state level, and the breadth of tribal management jurisdiction remains legally indistinct.

Further, the Supreme Court does not share the Ninth Circuit's perspective on some management jurisdiction issues. In 1981 the Court ruled that state governments—not Indian tribes or the fed-

^{131.} United States v. Powers, 305 U.S. 527 (1939).

^{132.} United States ex rel. Ray v. Hibner, 27 F.2d 909 (D. Idaho 1928). A summary of issues related to the conveyance of Indian water rights, in light of the case law through 1979, is in Palma, Considerations and Conclusions Concerning the Transferability of Indian Water Rights, 20 NAT. RESOURCES J. 91 (1980).

^{133. 647} F.2d 42, 51 (9th Cir.), cert. denied, 454 U.S. 1092 (1981).

^{134.} Id. at 42, 52-53.

^{135. 46} Fed. Reg. 944 (1981).

eral government—own the beds of navigable rivers flowing through Indian reservations, and state governments are therefore empowered to manage aquatic wildlife on and in those waterways.¹³⁶

The question of tribal rights and responsibilities in the area of water quality control is one which is only now emerging as an important policy concern. Several federal statutes governing water pollution control (like the Clean Water Act,¹³⁷ the Resource Conservation and Recovery Act (RCRA),¹³⁸ and the Safe Drinking Water Act¹³⁹) provide for a very substantial devolution of enforcement authority to state government. But state governments are now implementing their own enforcement programs at the same time that many tribal governments are trying to lure increased industrial activity onto reservation lands; and (over tribal objections) some states have been asserting authority to enforce their environmental programs on the reservations.

In 1985, the State of Washington in a RCRA action before the Ninth Circuit asserted that the state should be empowered to enforce its RCRA implementation program on the reservation. The court ruled against the state, holding that the EPA, rather than the state, should develop an implementation program, working directly with the tribe as a sovereign government.¹⁴⁰

But this case represents only the tip of the iceberg. A survey commissioned by the EPA and published in the same year as the *Colville* decision found nearly 1,200 hazardous waste dumpsites on or proximate to Indian reservations, mostly in the western states; some of them pose immediate and serious public health hazards.¹⁴¹

If non-Indian neighbors suspect the Indians of trying to attract polluting industries without adequately regulating the discharge of effluents, the tribes may face stiff legal opposition to any future development. Likewise, tribes are becoming more and more sensitive to the effects of non-Indian development on reservation water quality, and are becoming ever more willing to take legal action when they perceive a water quality threat.

^{136.} Montana v. United States, 450 U.S. 544 (1981).

^{137. 33} U.S.C. § 1151 (1982).

^{138. 42} U.S.C. § 6901 (1982).

^{139. 42} U.S.C. § 300f (1982).

^{140.} Washington v. EPA, 752 F.2d 1465 (9th Cir. 1985).

^{141.} INVENTORY OF HAZARDOUS WASTE GENERATORS AND SITES ON SELECTED INDIAN RESERVATIONS, prepared under contract to the EPA by the Council of Energy Resource Tribes (CERT/TR-85-1025, Project No. 061-1025) (July, 1985) (available from the Indian Affairs Coordinator, EPA, Region. IX, San Francisco).

F. Indian Interest Representation

Until passage of the Indian Reorganization Act in 1934, there was no confusion over who would represent the tribes in court; standing inhered solely in the federal government as the trustee of Indian interests. This arrangement engendered bitter resentment among many western tribes, since no other party could protect their water rights if the United States failed to do so.

As early as 1910, tribes in Arizona charged that the federal government, as putative guardian of the Indian right, was "selling them down the river" by bargaining away their water rights on terms highly advantageous to their non-Indian neighbors. Although the Reorganization Act empowered them to retain their own counsel subject to Interior Department approval, most tribes continued to rely primarily on the federal government for protection of their interests because of the extraordinary costs involved in the independent sponsorship of water rights litigation.

However, a sharp split has occurred and is now broadening between the Interior Department and some tribes over the interest representation issue. The most dramatic example of the problem involves the White Mountain Apache Tribe, which inhabits a mountainous reservation in the upper Gila River Basin of east-central Arizona.

In accordance with the Reagan Administration's interpretation of the 1976 Supreme Court ruling on water rights adjudication jurisdiction, and against the expressed wishes of the tribe, Interior Secretary Watt and Attorney General Smith in 1983 joined in state adjudication of the White Mountain Apaches' water rights, purportedly as representatives of tribal interests. The tribe itself has consistently refused to participate in state proceedings, and mounted an ultimately unsuccessful effort in the federal courts to enjoin federal executives from defending their water rights in Arizona courts.¹⁴³

The Supreme Court has also rejected tribal efforts to relitigate cases on their own behalf in instances where the tribes had earlier suffered a serious loss of resources because of the Interior Department's failure to adequately protect Indian interests. In *Nevada v. United States*, 144 the Court reversed the Ninth Circuit, in refusing

^{142.} J. FOLK-WILLIAMS, supra note 3, at 37-38.

^{143.} White Mountain Apache Tribe v. Smith, 675 F.2d 1341 (D.C. Cir. 1982), cert. denied, 463 U.S. 1228 (1983).

^{144. 463} U.S. 110 (1983).

to review a water rights settlement the federal government negotiated with non-Indian interests on the Paiutes' behalf in 1944. Agricultural diversions from tributaries to Pyramid Lake are now lowering the lake's water level and thereby threatening the reservation's trout fishery.

Recently, the Supreme Court again overruled the 9th Circuit and held that the Federal Energy Regulatory Commission need not obtain the consent of an Indian tribe prior to authorizing non-Indian hydroelectric power project development on or near tribal lands. Interior Secretary authority to condition but not veto a new FERC license was held to constitute sufficient representation of Indian interests.¹⁴⁵

Conflict of interest in the Interior Department regarding protection of Indian natural resource entitlements is a familiar theme to students of Indian law. 146 But for reasons developed earlier in this article, the severity of this problem is likely to be greatest in presidential administrations which adopt as a consistent policy the devolution of substantial resource management authority to state governments.

IV. DISPUTE SETTLING OPTIONS

A. Litigation

Earlier in this decade the Western Network, a regional research institute in Santa Fe, New Mexico, conducted a survey of all major Indian water rights disputes in the western United States.¹⁴⁷ Updated and expanded for the purposes of this research, the results appear in the Appendix to this article. The cases are organized according to the state in which they originated, the principal parties, citations to relevant documents, issues in controversy, and dispute managing methods attempted by the parties.

Tabulating data from the "dispute settling methods" column yields some interesting results. First, adversarial adjudication—either in the courts or before administrative tribunals—has been by

^{145.} Escondido Mut. Water Co. v. La Jolla Band of Mission Indians, 466 U.S. 765, 787 (1984).

^{146.} See, e.g., Comment, Interagency Conflicts of Interests: The Peril to Indian Water Rights, 1972 LAW & Soc. ORD. 313; Veeder, Confiscation of Indian Winters Rights in the Upper Missouri River Basin, 21 S.D.L. Rev. 282, 292 (1976); Price & Weatherford, supra note 89, at 114-15; Chambers & Price, Regulating Sovereignty: Secretarial Discretion and the Leasing of Indian Lands, 26 STAN. L. Rev. 1061 (1974).

^{147.} J. FOLK-WILLIAMS, supra note 3.

far the preferred method of dispute resolution in the cases brought by the tribes (in 40 of 50 cases, or 80%).

Negotiation has been seriously attempted in 12 of these disputes, but has resulted in comprehensive agreements resolving all Indian water rights claims in only two of them (the Ak Chin and Papago accords, see Appendix, Table 1, cases 8 and 9, discussed below). When this four percent settlement rate is contrasted with the overall national litigation pre-trial settlement rate of about 90%, 148 it is apparent these water rights cases as a class are unusually resistant to negotiated settlement.

There are at least four reasons for this distinct preference for litigation on the part of the tribes. First, there are century-old tribal memories of treaties signed with the U.S. Government in which the tribes relinquished land in return for congressional promises of adequate food, shelter, and economic aid—promises made but often never entirely fulfilled. Second, there are more recent memories of incidents such as the Navajo Indian Irrigation Project, in which the Navajo Nation relinquished a legitimate claim to nearly 800,000 acre-feet of water a year from the San Juan River in return for an irrigation project delivering less than 600,000 acre-feet, which the Interior Department then sought to unilaterally reduce to 370,000 acre-feet.

Third, throughout this century, whenever the federal government has negotiated the settlement of water rights disputes on behalf of various western tribes, the result has been a tactical disaster for tribal interests. Interior secretaries and U.S. Attorneys traded away Indian water rights on the tribes' behalf but without their consent in 1910, 1924, 1935, and 1944. Every one of those settlements is now the subject of renewed litigation, in which the tribes are charging that the federal government settled these historic disputes on terms so unreasonably favorable to the tribes' non-Indian neighbors that the results were virtual "giveaways" of tribal reserved water rights.¹⁴⁹

^{148.} The most recent authoritative estimate of the actual percentage of all civil actions filed in state and federal courts in the U.S. which settle out before trial is 88%, while the total number filed which for one reason or another never come to trial is 92%. The figure is based on the results of a comprehensive \$2 million survey of U.S. civil litigation by the University of Wisconsin Law School's Civil Litigation Research Project, conducted between 1978 and 1982. See Galanter, Reading the Landscape of Disputes: What We Know and Don't Know (and Think We Know) about Our Allegedly Contentious and Litigious Society, 31 UCLA L. Rev. 4, 28 (1983).

^{149.} These dates refer to the Kent Decree (1910) and the Globe Equity Decree (1935) in Arizona's Lower Gila River Basin (involving the Pimas and other Gila Basin

A fourth reason for the tribes' historic preference for litigation is that until quite recently the tribes have been highly successful in court. Nearly every case listed in Table 1 (Appendix), heard either by the 9th Circuit or one of the district courts within that circuit has been decided in favor of tribal interests.

If, as most dispute settlement theorists claim, rational disputants opt for the resolution method yielding the highest probability of achieving desired outcomes at the lowest cost and with the least risk, 150 the Indians' general preference for litigation is understandable. While certainly not inexpensive, the high percentage of Indian victories in the federal courts in the western states, combined with the dismal history of negotiation, goes a long way toward explaining why the tribes have traditionally preferred the federal bench to the local bargaining table.

But for the very same reasons, Table 2 (Appendix), shows why the tribes during the last decade have begun to lose enthusiasm for the litigation alternative. Of the six U.S. Supreme Court Indian water rights cases heard between 1976 and 1983, the Court decided against tribal interests in five of them. Further, Chief Justice Rehnquist and Justice O'Connor—both former Arizonans—are among those most consistently hostile to the Indian position.

It is also safe to assume that the views on states' rights versus federal sovereignty of whomever the next appointees to the Court are may well be determinative in the outcomes of many Indian water cases in the future. Arizonans Rehnquist and O'Connor are among the most states' rights-oriented members of the Court.

An expansion of this wing will in all likelihood absolutely preclude the possibility of tribes winning jurisdictional disputes against the states before the Supreme Court in the near future (Justice Kennedy's views in this area have yet to be fully explicated). For this reason alone, tribal interest in—though certainly not enthusiasm for—the negotiation process appears once again to be on the rise. 151

tribes); the Mission Indian case in southern California in 1924; and the Orr Ditch Decree, as it affected Nevada's Pyramid Lake Paiutes. For a more detailed discussion of these settlements, see J. FOLK-WILLIAMS, supra note 3.

^{150.} See generally R. Behn & J. Vaupel, QUICK ANALYSIS FOR BUSY DECISION-MAKERS 133-52 (1982).

^{151.} Minor but encouraging attempts at state-tribal cooperation in water resource management are also described in Commission on State-Tribal Relations, State Tribal Agreements: A Comprehensive Study 51-52 (May, 1981).

B. Legislation

Proposals considered by Congress for the settlement of Indian water rights conflicts may loosely be organized into three categories: (1) bills submitted by western states' rights advocates to legislatively terminate the *Winters* doctrine and extinguish all Indian claims to waters now in non-Indian use; (2) bills submitted by civil rights-oriented advocates for the federal adjudication of *Winters* doctrine claims, with—where necessary—termination of non-Indian rights and reassignment of those rights to the tribes; and (3) the case-by-case legislative settlement of disputes between specific tribes and their non-Indian neighbors. While no bills falling under categories (1) and (2) have yet been enacted, several have been proposed and are discussed below. Two major settlements in category (3) deserve our attention, and are covered in the following subsection on negotiation.

From 1955 to 1979, western congressional representatives and senators submitted over 50 bills for the termination or diminution of Indian reserved water rights. ¹⁵² Rather than reallocate already-appropriated water to the Indians, under most of these bills the federal government would estimate the amount of water due the tribes which non-Indians had already-appropriated under state law, and give the Indians a one-time cash payment for this water rather than the water itself. Payment of these funds would terminate all future Indian claims.

None of these proposals ever became law. Opponents charged that such an approach was an effort to retroactively legitimize the federal government's complicity in giving away Indian water to non-Indian westerners.

Unfortunately, the effect of "category two" proposals could be just as harsh for some non-Indian southwesterners as "category one" policies would be for the Indians. In 1973 the National Water Commission recommended that: (1) Congress should designate the federal district courts as having primary jurisdiction over the adjudication of all Indian water rights claims, to avoid the "suspicion of bias" involved in state court adjudication; (2) all Indian reserved rights should be quantified; and (3) when Indians can prove under the Winters doctrine that water already appropriated to non-Indians under state law is rightfully tribal water, non-Indian rights should be terminated, with damages payments made to the non-Indian appropriators (rather the reverse of "category one" damages

^{152.} See Note, supra note 97, at 1703-04.

proposals).153

Whatever the rational merit of these ideas, they proved to be quite unpalatable politically. In the 15 years since these category (1) and (2) policy recommendations were made, not one of them has been enacted into law. To many legislators, eastern and western alike, terminating the water rights of non-Indians who acquired these rights in good faith under state law is no more just a solution than terminating Indian rights. In short, at this time Congress appears deadlocked in its efforts to enact a fair, comprehensive program for resolving the Indian water rights conflict.

C. Negotiation

Congress has played a more limited but effective role in settling such disputes in the Southwest, by using federal reclamation project water as an inducement for Indian and non-Indian disputants to reach negotiated agreements rather than litigate. Just after the Ninth Circuit Court of Appeals ruled that the Winters doctrine applied to groundwater (the first appellate ruling was Cappaert in 1974), the San Xavier Papago filed suit against the City of Tucson, several neighboring miners, ranchers, and farmers for depletion of the groundwater underlying their reservation.¹⁵⁴ Had the Papago suit ultimately been successful, the tribe might have acquired rights to almost half the annual recharge of the entire Tucson-area groundwater basin, using the practicably irrigable acreage criterion. Since the City of Tucson and its neighbors are withdrawing groundwater about three times faster than it is being recharged, the Papagos could theoretically have brought to a halt all but a fraction of current groundwater pumping in the upper Santa Cruz Basin.

However, the Indians were amenable to negotiation, and the defendants were quite eager to settle out of court. The defendants resolved to experiment with self-regulation of groundwater withdrawals, and to seek new sources of water. The former task was made easier by the Arizona Legislature's 1980 enactment of strict new groundwater regulation legislation, 155 and the latter was facilitated by modifications in the as yet uncompleted Central Arizona Project.

What Congress essentially did in the Papago dispute was to "make the pie larger." Under the leadership of Tucson-area Con-

^{153.} NAT'L WATER COMM'N, WATER POLICIES FOR THE FUTURE 473-83 (1973).

^{154.} United States v. City of Tucson, No. 75-39 TUC (JAW) (D. Ariz. filed 1975).

^{155.} ARIZ. REV. STAT. ANN. §§ 45-451 to 45-455 (1987).

gressman Morris Udall—who chairs the House committee with legislative jurisdiction over Indian affairs and reclamation—a settlement was fashioned in which the Papagos would abandon all Winters doctrine claims to Santa Cruz Basin surface and groundwater in return for deliveries of specified quantities of agricultural-grade water from the Central Arizona Project. (The CAP is a huge project designed to haul Colorado River water half way across Arizona to Phoenix, then bring some of it uphill to Tucson, 120 miles to the south. When the Papago bargain was struck, the Tucson Aqueduct portion of the CAP had not yet been built, nor the location of the Tucson terminus decided. As a result of the Papago bill, the terminus was located above the city at the reservation border.) Congress ratified the agreement in October of 1982. 156

When the San Xavier Papago negotiations were first getting under way, the Ak Chin Indian Community (an agricultural reservation of Pima and Papago Indians between Phoenix and Tucson) informed the Interior Department that neighboring non-Indian groundwater withdrawals had caused a 300-foot drop in the reservation's water table. A bill obligating the federal government to replace the Ak Chin Community's water cleared Congress in 1978.¹⁵⁷

Both the Ak Chin and Papago bills contain provisions in which the Indians agreed to abandon all *Winters* doctrine claims in return for the federally guaranteed delivery of specified quantities of water. If the federal government does not deliver water, it must pay the tribes money damages instead.

Unfortunately, the Interior Department initially failed to uphold the Ak Chin agreement. The original 1978 Ak Chin Act called for the drilling of new wells, which ultimately proved infeasible. When in 1982 the department failed to ask Congress for more money to find other water supplies for Ak Chin, the Indians threatened to invoke the damages clause of their agreement (calculated at about \$50 million).

Subsequent to this sabre rattling, Interior Secretary Watt agreed to meet with Ak Chin representatives and advisors in December of 1982 to work out some compromise arrangement.¹⁵⁸ But on the day of the meeting, the Secretary didn't show up; he had become

^{156.} Southern Arizona Water Rights Settlement Act of 1982, Pub. L. No. 97-293, 96 Stat. 1274.

^{157.} Act of July 28, 1978, Pub. L. No. 95-328, 92 Stat. 409.

^{158.} Perry, Delayed Project Has Tribes Leery on Watt Water 'Settlements', Arizona Republic, Jan. 2, 1983, at A1.

involved in a "summit conference" among western states governors, several western tribes with energy minerals resources, and some Indian rights organizations—a meeting to which the Ak Chin were not invited.

Instead, he sent Assistant Secretary for Indian Affairs Ken Smith to inform Ak Chin leaders that the original \$42.5 million appropriation for agreement implementation was considerably depleted. Further, because of the technical problems cited above, the Reagan Administration (or at least its Office of Management and Budget) saw no point in requesting supplemental appropriations to implement an increasingly unworkable act.¹⁵⁹

To the Ak Chin representatives and their advisors, it seemed that the worst fears of all Indians regarding negotiations with the federal government had just been reconfirmed. Gene Franzoy, the Community's consulting hydrologic engineer, observed that "at the same time Watt was upstairs saying how much help the federal government will give the Indians, we met downstairs to hear that they are not going to keep this project on line." ¹⁶⁰

Ak Chin Community Chairwoman Leona Kakar was more direct. "All we get are lies," she said. "If this law is not upheld, I will alert every Indian in the nation to be very cautious about any so-called settlement of water rights by negotiation." 161

News accounts of the Ak Chin Community's predicament and their attorney's expansive formula for calculating damages evidently had the desired effect. In September of 1983, Secretary Watt signed a revised agreement with the Community.¹⁶²

In the new agreement, the Interior Department promised to arrange for grants and loans equaling the damages amount to help the Indians prepare additional lands for cultivation, and to deliver the entire Ak Chin water allotment through the Central Arizona Project. The 1985 amendments to the Ak Chin settlement act reflected these changes.

Only time will tell whether the Ak Chin and Papago agreements will prove a satisfactory alternative to reserved water rights litigation. Much will depend on how conscientiously the federal government adheres to its promise to deliver water to the reservations.

Every tribal government in the West is monitoring implementa-

^{159.} Id.

^{160.} Id.

^{161.} Id.

^{162.} Office of the Secretary, U.S. Dep't of the Interior, Agreement in Principle for Revised Ak Chin Water Settlement (Sept. 23, 1983).

tion of the Ak Chin and Papago settlements. If the reservations receive the water they have been promised in these agreements, it will be added encouragement to other tribes now litigating their water rights to consider negotiation more seriously. Conversely, if the federal commitment to upholding these agreements falters and the Ak Chin and Papago are forced to sue for money damages, other tribes will be stiffened in their resolve—as expressed by the White Mountain Apaches—to never discuss water rights except in court.

D. Near-term Alternative Futures

At least through the end of this century, it is likely that three classic dispute-settling options—litigation, legislation, and negotiation—will continue to dominate the policy debate over how the American Indian water rights dilemma should be resolved; each is discussed briefly below. Section V then provides more detailed substantive and procedural suggestions for increasing the likelihood of the fair and durable negotiated settlement of some of these disputes.

1. Litigation: More of the Same

As the tribes fight to keep their suits in federal court, the states fight to remove them to their own jurisdiction, and the transaction costs involved in litigation continue to mount. There will be a continuing effort to get Congress to legislatively limit the *Winters* doctrine, which the civil rights coalition will continue to oppose. Negotiation will enjoy only limited success, as litigants await the outcome of pending major cases to find out which side will obtain the greatest future bargaining power, based on those precedents.

2. Legislative Solutions: Water Rights Termination or an Indian/Reclamation Coalition

As the U.S. population continues to migrate westward and western influence in Congress continues to grow, the frustration of development expectations caused by Indian water rights litigation might yet trigger federal legislation terminating or limiting the *Win*ters doctrine. But in addition to the dubious moral and constitutional validity of such an approach, achieving this result would be expensive. Even if Congress decided to terminate Indian water rights, under current proposals it would be obligated to pay the Indians fair market value for those rights, as determined by the U.S. Court of Claims.

The possibility of congressional termination of non-Indian rights

to satisfy Indian claims seems far more remote than the legislative termination of reserved rights. Non-Indian political power in Congress is growing and is likely to continue to grow much more quickly than is tribal political influence.

Less morally objectionable but no less costly is the approach exemplified by congressional settlement of the Ak Chin and Papago disputes: more water projects. Throughout most of this century the powerful western reclamation lobby and its champions in Congress almost totally ignored the rights and needs of Indian reservations in developing major reclamation projects. But now that serious federal project funding has apparently dried up, the reclamation lobby has suddenly discovered the plight of the poor Indian. For example, it has been suggested that an unstated purpose of the Ak Chin and Papago water rights settlement legislation was to morally obligate Congress to resume appropriations for the Central Arizona Project, which in the late 1970's was languishing unfunded and uncompleted on the Carter Administration's water project "hit list." 163

If this approach is more fully developed, Indian tribes and reclamation lobbyists will formally join forces, and every future western water project proposed to Congress will contain a major Indian reservation component. Members of Congress who oppose these projects will be vulnerable to accusations that they are insensitive to the legitimate water rights claims of an impoverished rural minority group.

This strategy will also put the conservationists in an interesting position; fighting reclamation proposals which will benefit Indian reservations will once again open them to charges of elitism and socio-economic indifference. But for this strategy to succeed, project boosters will have to find a way to divert or disguise a lot of federal red ink before they can develop any more western water.

3. The Negotiation Alternative

As noted earlier, dispute resolution theorists assert that the rational disputant will choose that settlement method demonstrating the highest probability of yielding a desired outcome at the lowest cost and with the least risk. This may explain the Indians' historic preference for litigation. While not cheap, it has been effective; and

^{163.} Several respondents interviewed during the course of this research made this comment, but always on condition that it not be directly attributed to them.

their odds of winning future disputes have enhanced their present bargaining power.

Furthermore, the lessons of history have taught them that negotiation can be risky indeed. During the 19th century, western tribes signed treaties with the federal government wherein they collectively relinquished control over about 200 million acres of land, in return for much smaller federal reservations and the promise of continued congressional support in the form of food, shelter, farming implements, and other supplies necessary for becoming economically self-sufficient. But the promises made by one session of Congress were more often than not either incompletely honored or ignored altogether by later ones. Short of suicidal attempts at warfare, the 19th century tribes had no means of forcing the federal government to keep its word.

Now that the Interior Department is urging the tribes to negotiate their water rights claims as the federally preferred means of dispute settlement, ¹⁶⁴ many tribes fear that if they do make such agreements, they will lose important water rights in the future just as they lost rights to most of their land in the past. At the same time, though, the tribes have recently been losing their jurisdictional disputes before the Supreme Court; and the prospect of state adjudication of their claims is making the litigation alternative look far riskier and less successful—but no less costly—than it has been previously. If negotiation could be made less risky and more cost-effective, yet produce minimally acceptable outcomes, it could become a much more attractive dispute-settling option.

V. ENHANCING THE POTENTIAL FOR NEGOTIATED SETTLEMENTS

Because of the diversity of issues, personalities, and geographic circumstances involved in American Indian water rights controversies, no one dispute-settling method will ever be equally attractive to all disputants in all cases. Turnovers in tribal, federal, and state government leadership, decisions in pending court cases, and the future economic health of the American West will all influence to some degree what dispute-settling methods are attempted in the future and how successfully they will be employed.

^{164. &}quot;Watt Seeks Negotiated Settlement for Indian Water Claims Suits; Will Create Negotiating Teams and Advisory Groups to Guide Settlement" (U.S. Dep't of the Interior news release, July 14, 1982).

But at the very least, negotiation can be made less objectionable to the western tribes. Underlying the following policy recommendations is the premise that it will be to the ultimate benefit of *all* disputants if the range of effective, acceptable dispute-settling options is broadened. To that end, the following recommendations focus on ways to help make the negotiation process more fair and more cost-effective, and the implementation of negotiated agreements less risky for all parties concerned.

A. Institutional Innovation: An Indian Water Rights Commission

The Interior Department is now actively urging western tribes to negotiate rather than litigate their water rights claims, but many tribes are suspicious of any consensus-based proceedings the department chairs; they see the department as having had a major role in giving away their water to non-Indian westerners in the first place. One way to avoid these conflict-of-interest charges would be to remove negotiation jurisdiction from the Interior Department, and vest it instead in an intergovernmental Indian water rights commission, in which the department would participate but which it would not control.

1. Composition

As the earlier discussion of issues and cases revealed, intergovernmental jurisdictional competition is in many instances at the core of these disputes. Therefore, any commission established by Congress for the non-adjudicated resolution of those disputes should be comprised of effective representatives of the various governmental interests at stake.

Of necessity, then, Indian Water Rights Commission membership would include representatives of western state governments and western tribes (perhaps two each, from different geographic regions), the U.S. Interior Department, and Congress. The President would appoint state, federal, and Indian representatives, in consideration of the recommendations of organizations such as the Western Governor's Conference and the National Congress of American Indians. The Speaker of the House and President Pro Tem of the Senate would appoint one member each, to ensure adequate continuing communication with the House and Senate Interior Committees. 165 Congressional involvement is necessary because any water

^{165.} Buckley v. Valeo, 424 U.S. 1 (1976), struck down as violative of separation of

rights agreements the commission might establish would require legislative ratification, in keeping with Congress' trust obligations.

Since the functions the commission will perform would include the empaneling of mediators and the establishment of guidelines for model agreements, decisionmaking by the commission on such crucial issues would have to be consensual. Otherwise, Indian representatives might consistently be in the minority, if such actions were by majority vote.

2. Functions

a. Intergovernmental Water Resource Planning

In any major western water resource allocation controversy, dozens of independent governmental jurisdictions may be involved. These may include tribal governments, numerous federal agencies (e.g., Bureau of Reclamation, Corps of Engineers, National Park and Forest Services, Federal Energy Regulatory Commission), state water commissions, local conservancy and conservation districts, and municipalities. Each of these government units usually has its own planning department and its own plans for water resource management.

Furthermore, the relative success of each unit in achieving its planning goals may depend quite directly on the ability of other units to meet theirs. Some of these jurisdictions have broadly complementary goals, while the goals and objectives of others are in essence mutually exclusive.

One important and much-needed service an Indian Water Rights Commission can perform will be to act as a forum for the coordination of water resource planning. The impact of proposed Indian water use on neighboring non-Indian uses may in some cases be slight, and in others very substantial. Even if the theoretical entitlement of the tribes and their neighbors are clarified, their ability to

powers the original composition of the Federal Elections Commission as originally established at 2 U.S.C. § 437c(a)(1) (1974). Congress had established the commission along the same lines suggested for the Indian Water Rights Commission, with the House Speaker and Senate President Pro Tem each appointing members. However, in Buckley the Court ruled that the statute's constitutional infirmity lay in the fact that these congressional appointees to the commission would be exercising rulemaking, adjudicatory, and enforcement authority—actions reserved to the executive; while the functions of the proposed water rights commission will be essentially mediative and advisory in nature. In the alternative, congressional appointees to the Commission could in fact be appointed by the President, on the recommendation of the Speaker of the House and President Pro Tem of the Senate.

actually use these waters will depend largely on how well they are able to coordinate the implementation of those uses.

It is also quite possible that through inter-agency planning coordination, planning solutions may be discovered for what were formerly thought to be exclusively legal questions. For example, the first institutional step in resolving the groundwater dispute between the San Xavier Papagos, the city of Tucson, and other non-Indian users was the founding of an ad hoc regional planning commission, in which all the principal disputants participated.¹⁶⁶

b. Data Base Generation

Also integral to the settlement of the Tucson/Papago dispute was the provision of a wealth of geohydrologic data by the U.S. Army Corps of Engineers. Due to the timely publication of a Santa Cruz River Basin groundwater study Congressman Udall asked the Corps to conduct after the Papago suit was filed, ¹⁶⁷ all the disputants had the best available data on the status of their groundwater resource at their disposal by the time negotiations began.

In traditional water rights litigation—especially involving groundwater—it is the disputants themselves who through the discovery process must finance the assemblage of the data base, both from existing records and with original research. But if a neutral third party assembles the best currently available data and supplements it with new studies where necessary (perhaps commissioning such studies to an agency such as the U.S. Geological Survey), it is less likely that disputants will spend an inordinate amount of time fighting over numbers (i.e., challenging the data provided by each others' hydrologists). Moreover, having the Water Rights Commission supply the data base would lower the transaction costs of disputants participating in negotiations.

c. Model Agreement Drafting

One of the more significant innovations in 20th century American jurisprudence has been the work of organizations such as the American Law Institute. Progressive and much-needed law reform in many aspects of American social ordering came about through comparative research, the gleaning of the most workable aspects of

^{166.} Tucson Active Management Area, Arizona Dept. of Water Resources, A Water Issues Primer for the Tucson Active Management Area 45 (June 1982).

^{167.} Authorization cited in Corps of Engineers (Los Angeles District), U.S. Dept. of the Army, *Tucson Urban Study, Draft Regional Water Supply Appendix* 1-1 (Dec. 1981) (unpublished preliminary draft).

various state laws, and the fashioning of model codes embodying the best elements of these new laws. Increased rationality, standardization of policy implementation, and greater substantive and procedural fairness have often been the result of model code research.

A similar effort by the proposed Indian Water Rights Commission could result in the formulation of guidelines for model agreements among parties trying to resolve Indian water rights disputes. Standardized alternative means of computing practicably irrigable acreage, formulae for coping with supply shortages in drought years, adoption of water quality standards, minimum flow guarantees, and other related issues must be resolved in nearly all Indian water rights cases now being adjudicated. If the proposed commission were to formulate standardized alternative means of resolving each of these issues, disputants in future cases would be saved the task of having to "reinvent the wheel" each time agreement on any of these questions is sought.

Another benefit from the drafting of model agreements would be the evolution of substantive norms for future dispute resolution. Although elements of a model agreement would not be binding on future disputants, alternative model agreements would represent the commission's shared perception of what elements do and do not constitute fair and appropriate settlements—as well as indicating to inexperienced or ill-advised negotiators what settlement features are considered by the commission to be inequitable or unworkable.

d. Adoption of Guidelines and Principles for the Negotiation Process

Just as drafting guidelines of alternative model agreements would aid the development of substantive norms for the negotiated settlement of Indian water rights disputes, the adoption of guidelines and principles for the *conduct* of negotiations would enhance the evolution of procedural norms for dispute resolution. Guidelines to ensure that negotiations are conducted in good faith, that threshold levels of efficiency and decorum are maintained, and that manifestly unfair bargaining tactics are not employed, could do much to improve the prospects for negotiated settlements. Procedural guidelines similar to those employed by the Federal Mediation and Conciliation Service might be adopted, and modified as necessary.

e. Empaneling of Facilitators and Sponsorship of Negotiations
Finally, the proposed commission would offer its services to dis-

putants as convenor of settlement negotiations. In this regard, the commission would maintain a panel of experienced and respected mediators (commission employees and/or consultants), from which disputants could choose their preferred intermediary, if they felt the need for one and had not succeeded in finding such an intermediary on their own.

B. Distributive Recommendations

Congress was able to play an effective role in settling the Papago and Ak Chin disputes in southern Arizona because it was willing to spend the money to augment existing water supplies. But given the budget-balancing problems the federal government is now facing, massive and costly new federal programs like the Central Arizona Project in other areas of the West seem an unlikely near-term possibility. Smaller scale and more creative new solutions must be found to the closely related problems of (1) how to honor competing water rights claims of Indian and non-Indian parties, and (2) how to finance the provision of water to satisfy those claims. The following two suggestions address the first problem, and the third discusses financing.

1. Voluntary Reallocation of Existing Supplies

Two features in the rapidly changing panorama of western water policy are of special significance when examining how existing supplies may be voluntarily reallocated. First, in most of the 17 western states eligible for federal reclamation projects, about 85% of all developed water supplies are devoted to agriculture. Second, as federal water delivery contracts are being renegotiated to reflect something approximating the true costs of water delivery (thus cutting back on the subsidies enjoyed by reclamation project customers for most of this century), many forms of agriculture in the West are becoming increasingly unprofitable.

In other words, there is water for sale if the price is right and the government will allow the transaction. And as the West continues to urbanize and its cities offer to pay farmers more for their water rights than their crops, there will be more water available for sale.

What this provides is the opportunity for the Interior Secretary to act as a "water banker," buying up water rights from willing sellers in the growing "water markets" of the West, and then conveying those rights to the Indians in satisfaction of legitimate Win-

^{168.} FRADKIN, supra note 41.

ters doctrine claims. The tribes could then either seek capital to develop the resources just acquired for their own uses, or they could contract for the sale of the newly acquired waters (but not the water rights) to interested municipal, industrial, or agricultural buyers.

This kind of arrangement was written into the legislation which settled the Papago Indians' groundwater suit in southern Arizona. If for some reason Congress never gets around to finishing the Central Arizona Project and delivering water to the Papago reservation, the Interior secretary is obligated to purchase water from willing sellers to honor delivery promises made to the Indians in this legislative agreement.¹⁶⁹

As western state governments and various water resource entrepreneurs continue to experiment with the water marketing concept, there will probably be a good deal more water "for sale" in the near future than has been possible in the past. This intriguing experimentation with market mechanisms in what has traditionally been a heavily regulated activity offers the federal government a vital new opportunity in regions where existing water supplies already have been fully appropriated.

Indians and the federal government would then not need to use the courts to terminate non-Indian appropriative rights in order to honor tribal reserved rights, and Congress would avoid the odious temptation to adopt legislation unilaterally terminating tribal reserved rights. Instead, the federal government could use the market to effect a voluntary reallocation of water rights from willing sellers to tribal governments.

2. Conservation-based Expansion of Existing Supplies

Another means of alleviating the competition for scarce water resources among disputants with legally sound but mutually exclusive claims is to augment existing supplies. But if major new project funding seems unlikely, how can the "pie be made larger"?

Events now unfolding in the lower Colorado Basin may help provide the answer. During the Carter Administration's economically rational but politically suicidal efforts to cut back or cancel porkbarrel water projects, an inter-agency task force also took a hard look at irrigation efficiency. In its report, investigators calculated the water savings resulting if reclamation project delivery systems and end-use irrigation systems were retro-fitted with state-of-the-art

^{169.} Southern Arizona Water Rights Settlement Act of 1982, Pub. L. No. 97-293, § 304, 96 Stat. 1274, 1276-78.

technologies for water conservation. They found that in the South-western region alone, with conservation retro-fitting fully implemented they could avoid having to divert eleven million acre-feet of water a year.¹⁷⁰

Since that time, serious attention has been devoted to the possibility of urban consumers in water-scarce regions financing the conservation retro-fitting of aging reclamation/irrigation systems, in return for the use of the waters thereby conserved.¹⁷¹ In California, the most fully developed proposal along these lines concerns the persuasive economic and technical feasibility of such an arrangement between the 80-year-old Imperial Irrigation District (along the lower Colorado River) and the Metropolitan Water District (which wholesales water to Los Angeles and about four dozen other southern California municipalities).¹⁷²

In the Southwestern region encompassed by the irrigation efficiency task force study, there are about twenty tribes involved in serious water rights disputes (see Table 1, Appendix). The Papago and Ak Chin settlements resulted in a federal obligation to deliver roughly 60,000 acre-feet of water a year to the Ak Chin; while the San Xavier Papago settled for just under 40,000 acre-feet. But assuming that the average legitimate claims of all tribes in the region were four times that great (say 200,000 acre-feet per year per tribe), this figure still represents an aggregate demand of only five million acre-feet, which is less than half the amount of water estimated conservable through conservation retro-fitting in the Southwestern region.

3. Financing

From the rough analysis just described, it seems quite possible that a combination of "water banking" and conservation retro-fitting can play a critical role in resolving the allocational dilemma facing Indian and non-Indian water rights disputants. Yet it is important to examine how all of this voluntary reallocation and technological upgrading will be financed.

It may be helpful first to review once again the history of federal

^{170.} U.S. DEP'T OF INTERIOR, DEP'T OF AGRICULTURE & ENVIRONMENTAL PROTECTION AGENCY, IRRIGATION WATER USE AND MANAGEMENT (Interagency Task Force Report June 1979), cited in WILLEY, infra note 171, at 24-25.

^{171.} Z. WILLEY, ECONOMIC DEVELOPMENT AND ENVIRONMENTAL QUALITY IN CALIFORNIA'S WATER SYSTEM (Univ. of California, Institute for Governmental Studies 1985).

^{172.} Id. at 17-31, and studies cited therein.

reclamation program development and the Interior Department's concomitant conflict of interest regarding the protection of Indian water rights.

For the last eighty-five years, the Bureau of Reclamation has been spending federal funds to build western irrigation projects, which impounded the region's surface water resources and then redistributed them to local farmers at subsidized prices in accordance with state prior appropriation doctrine. Meanwhile, Interior's Bureau of Indian Affairs did precious little to defend the rights of the tribes, who held theoretically superior *Winters* doctrine claims to much of the water being developed.

Thus, since the turn of the century the economies of the seventeen western states eligible for reclamation assistance have benefited enormously from the nation's investment in the development of their water resources. And at the same time, the federal government has enjoyed revenues from the sale of water and hydroelectric power generated by federal reclamation projects. These revenues are earmarked primarily for the repayment of federal outlays for project construction, until those debts are retired.

In 1982 the Bureau of Reclamation realized a total operating income of just over \$423 million for the sale of water and power to its customers in the reclamation states.¹⁷³ It is these same consumers and their antecedents who have been reaping the economic benefits of using what may have rightfully been Indian water over the last eight decades. Therefore, one way to facilitate the sharing of these historic benefits with disenfranchised tribes is to establish a temporary surcharge on the sale of water and power from reclamation facilities, and use the proceeds to finance conservation retro-fitting, voluntary market-based reallocation, and the costs of administering the proposed Indian Water Rights Commission.

A five percent surcharge on 1982 revenues, for example, would result in an annual yield in excess of \$20 million. While this isn't sufficient income to finance the immediate satisfaction of all Indian claims, it could certainly do so over time. Further, priority in the allocation of these funds could be awarded to those tribes who volunteer to negotiate their claims before the proposed commission, thereby providing an added inducement to negotiate rather than litigate.

^{173.} BUREAU OF RECLAMATION, U.S. DEP'T OF INTERIOR, SUMMARY STATISTICS: WATER, LAND, AND RELATED DATA 27, Table 1 ("Bureau Income from Operations") (1982).

However, this solution raises two more political problems, both of which must also be solved for the plan to succeed: (1) convincing the tribes that Congress will keep its promises over time to fund voluntary reallocations and conservation retro-fitting, and (2) convincing Congress to adopt a temporary water and power surcharge system, which many reclamation states may oppose.

The tribes have no grounds for believing that Congress will keep appropriating adequate funds until all water rights claims are satisfied, and there is plenty of historical evidence to suggest that Congress has a surprisingly short memory, when it comes to keeping promises already made.

One effective means for dealing with the congressional memory loss problem (i.e., failure of Congress in future years to continue appropriating funds to provide Indian water) is to use proceeds from the water and power surcharge to establish a trust fund. Assuming a \$20 million annual income from the surcharge, and a 10% annual yield on the investment, in ten years' time this reserved water rights fund would have capital assets of \$200 million and an annual yield of \$20 million. At the end of this ten year period, the politically unpopular surcharge program can be terminated; and a reliable mechanism for funding Indian water rights claims will have been established—a mechanism which does not involve a continuing drain on a deficit-plagued federal budget and does not subject promises made to the Indians to the politics of the budgetary process.

Admittedly, this surcharge plan will not play too well in the reclamation states. But it is these same states which have seen their own recent economic development impeded by the clouds of uncertainty created by Indian water rights litigation. Congress is apparently not ready to take the morally indefensible step of crushing Indian claims through reserved rights termination legislation, and many of the cases now inching their way through state and federal courts in the West will probably extend well into the next century.

If the states wish to continue expeditiously developing their economies through developing their water, there is a price to be paid—both monetary and moral. Those payments may be in the form of court costs, legal fees, and the perpetuation of Indian-Anglo hostilities in the West; or in the form of something like the consensus-based allocation plan described above.

VI.

Given the long and bitter history of Anglo-Indian water rights conflict described in this article, it may seem a little unrealistic to suggest that so intractable a dilemma might be resolved by the means suggested here. But it also seems that traditional institutional mechanisms have so far not served us well.

The position of the tribes is for the most part legally strong, but politically and economically weak. They are still winning most of their lower court battles (when they can afford to fight them), but in Congress they haven't enough friends to legislatively declare their reserved rights superior to state water law nor enough enemies to take those rights away through termination legislation.

Right now everybody wants to negotiate but the Indians, who are understandably suspicious of any proceeding controlled by the Department of the Interior and dependent on continuing appropriations from a historically forgetful Congress. The concluding suggestions in this article describe a potential middle ground, in which all parties can get enough of what they need out of current disputes, risks are kept at acceptable levels, transaction costs are lowered, and allocational burdens are widely and temporarily distributed.

Depending on the procedures used and outcomes achieved, negotiated settlements may represent either capitulation or justice by other means. The key question for legal disputants is whether the principles they are fighting to protect and the goals they are trying to achieve can be safeguarded in consensus-based proceedings.

In binary adjudication, the rights of one side are often damaged egregiously in service to the rights of another, and the costs to both parties are very high. In negotiation, positions must become flexible, although dedication to principle need not be.

So far, our legal system has not proved itself capable of comfortably accommodating federal reserved rights and state prior appropriation doctrine side by side. Historically, in the many "zero-sum" water rights cases heard so far, one side (statistically, usually an Indian tribe), has prevailed at the expense of the other. But the tribes have often won hollow victories; after the expense of adjudicating their rights, they do not have nor can they attract the capital to develop the resource. And though generally successful in the lower federal courts, the tribes are often now losing appeals to the Supreme Court.

In negotiation, each side will have to yield on positions. The Indians will probably have to scale back their demands somewhat, and non-Indian disputants will have to acknowledge the legitimacy of Indian claims in principle if not in amount.

As politically difficult as a water and power surcharge on reclamation project proceeds might initially be to establish, it does broadly distribute the costs of satisfying legitimate *Winters* doctrine claims among those who have been enjoying the benefits of using (arguably) Indian water over the last eight decades. And it is apparent to all serious students of the Indian water rights dilemma that there is no easy, cost-free solution to the problem that does not transgress on the substantial legal claims of one party or another, whether those claims originated under state or federal law.

In the final analysis, disenfranchising either the Indians or prior appropriators isn't a cost-free exercise anyway. The difference is that the cost will not be in the form of use-based revenue, but in the loss of our self-regard as a just society.

Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES*

State	Indian & Other Disputants	Citations	Issue(s)	Dispute	Manage	Dispute Management Method(s)	thod(s)
	(& case names, if applicable)			Lit.	Nego.	Nego. Ad.Adj. Legis.	Legis.
Ariz.	1. Lower Colorado River tribes party to Arizona v. California, on AZ side of the River; US, AZ, CA.	460 U.S. 605 (1983)	PRR to lower Colo. River	×			
	2. Hopi & Navajo tribes; US; local irrigators; municipalities (Navajo Nation et al. v. US)**	463 U.S. 545 (1983)	FJ, PRR to Little Colorado River	×			
	3. Arizona v. San Carlos Apache**	463 U.S. 545 (1983)	FJ, PRR to Salt River	×			
	4. Apache, Maricopa, Papago, Pima, & Yavapai tribes; US; AZ; municipalities, local irrigators, mining cos. (US v. Gila Valley Irrigation Dist.)**	454 F.2d 219 FJ, PRR (9th Cir. 1972) Gila Riv.	FJ, PRR to Lower Gila Riv.	×		×	
	5. Salt River Pima-Maricopa Indian Community v. State of Arizona**	rev'd. 463 U.S. 545 (1983)	FJ, PRR to Salt River	×			
	6. Fort McDowell Mohave-Apache Indian Community v. Salt River Valley Water Users Ass'n.**	rev'd. 463 U.S. 545 (1983)	FJ, PRR to Verde River	×			
	7. Gila River Pima-Maricopa Indian Community; Kennecott Copper Co. (Water Rights Settlement & Exchange Agreement)	private agreement, signed 1/1/77	private bi-lateral PRR to limited area in lower Gila Basin		×		
	CONTINUED						

* Survey completed 3/82; updated 4/88. **One of several suits filed in this dispute. Key to issue symbols: FJ=forum jurisdiction; FP=fisheries protection; G=groundwater; IIR=Indian interest representation; MIF=maintenance of instream flow; PC=pollution control; PRR=perfection of reserved rights; RO=riverbed ownership.

Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES* (continued)

State	Indian & Other Disputants	Citations	Issuc(s)	Dispute	Manage	Dispute Management Method(s)	(s)poq
	(& case names, if applicable)			Lit.	Nego.	Nego. Ad.Adj. Legis.	Legis.
Ariz. (cont)	8. Papago tribe; City of Tucson; local irrigators; mining cos.; several thousand private water users; US (US v. City of Tucson; Southern Arizona Water Rights Settlement Act of 1982).	Civ. No. 75-39 TUC (D. Ariz. 1975); PL 97-293 (1982).	Civ. No. 75-39 PRR(G) to upper TUC (D. Santa Cruz River Ariz. 1975); Basin PL 97-293 (1982).	×	×		×
	9. Ak Chin Community of Indians; local irrigators; US (Ak Chin Indian Community Water Rights Settlement Act).	P.L. 95-328 (1978)	PRR(G) to lower Santa Cruz River Basin		x		×
	10. Same tribes as #4, plus Yaquis; US; AZ; Phoenix; Tucson; local irrigators (Babbitt v. Andrus)**	See Folk- Williams, supra.	PRR(S&G) — allocation of water supply from Central Ariz. Project	×	·	×	×
	11. White Mountain Apache v. William French Smith & James Watt	463 U.S. 1228 (1983)	IIR	x			
Calif.	Calif. 12. Lower Colorado River tribes party to Arizona v. California on Calif. side of the river (same as case #1)	460 U.S. 605 (1983)	PRR to Lower Colorado River	×			
	13. Various Mission Indian bands, US; municipalities, utility cos (San Pasqual, La Jolla, Rincon, Pauma, and Pala Bands of Mission Indians v. FERC; US v. Escondido Mutual Water Co.	692 F.2d 1223 (1982)	IIR, PRR, MIF hydropower licensure on San Luis Rey River	×	×	×	×
	CONTINUED						

• Survey completed 3/82; updated 4/88. ••One of several suits filed in this dispute. Key to issue symbols: FJ = forum jurisdiction, FP = fishenes protection, G = groundwater; IIR = Indian interest representation, MIF = maintenance of instream flow; PC -- pollution control, PRR = perfection of reserved rights, RO = riverbed ownership.

Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES* (continued)

(s)po	egis.							
Dispute Management Method(s)	Nego. Ad.Adj. Legis.	×			×			
Manage	Nego.		×	x		×	×	
Dispute	Lit.		x	×		x	×	
Issue(s)		MIF hydropower licensure on White River in Coachella Basin	PC(FP) on tributaries to Klamath River	PRR to tributaries of the San Juan River, construction of the Animas-La Plata Proj.	MIF(FP) — hydro power licensure on Kootenai River.	FJ, PRR to Tongue River	PRR to Big Horn River	
Citations		20 F.E.R.C. Rep. 61,349 (Sep.23, 1982)	764 F.2d 581, cert. granted 107 S.Ct. 1971.	See Folk- Williams, supra.	See Folk- Williams,	463 U.S. 545 (1983)	rev'd. 463 U.S. 545 (1983)	
Indian & Other Disputants	(& case names, if applicable)	14. Agua Caliente Band of Mission Indians; utility co.; US (In the Matter of So. Cal. Ed. Co.).	15. Karok, Tolowa, & Yurok tribes, US; environmental groups (Northwest Indian Cemetery Protection Ass'n. v. Peterson).	 Ute tribes; US; CO; local irrigators; environmental & recreation groups; (In the Matter of the Application for Water Rights of the U.S., Water District No. 7, Colo.) 	Idaho 17. Kootenai bands; US; utility co.; environmental & recreation groups	18. Northern Cheyenne tribe; US; MT; local irrigators (Montana v. Northern Cheyenne Tribe)**	19. Crow tribe; US; MT; local irrigators (US v. Big Horn Low Line Canal et al.)**	CONTINUED
State		Calif. (cont)	_	Colo.	Idaho	Mont.		

* Survey completed 3/82; updated 4/88. **One of several suits filed in this dispute. Key to issue symbok: F1=forum jurisdiction; FP=fisheries protection; G=groundwater; IIR=Indian interest representation; MIF=maintenance of instream flow; PC=pollution control; PRR=perfection of reserved rights; RO=riverbed ownership.

Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES* (continued)

State	Indian & Other Disputants	Citations	Issuc(s)	Dispute	Manage	Dispute Management Method(s)	(s)pou
	(& case names, if applicable)			Lit.	Nego.	Nego. Ad.Adj. Legis.	Legis.
Mont. (cont)	20. Crow tribe; US; MT (Montana v. US)**	450 U.S. 544 (1981)	RO Big Horn River	x			
	21. Blackfeet, Assiniboine, Sioux, Gros Ventre, & Chippewa-Crec tribes; US; MT; local irrigators (US v. Aageson)**	rev'd. 463 U.S. 545 (1983)	FJ, PRR to Milk & St. Mary Rivers	×	×		
	22. Assiniboine & Sioux tribes; US; MT; local irrigators (US r. Aasheim)**	Id.	FJ, PRR to Big Muddy & Poplar Rivers	×	×		
	23. Salish & Kootenai tribes; US; MT; local irrigators (US v. Abell)**	Īd.	FJ, PRR to Flathead River System	×			
	24. Blackfeet tribe; US; MT; local irrigators (US v. AMS Ranch)**	Id.	FJ, PRR to Marias River system	×			
	25. Salish & Kootenai tribes; US; utility co. (In the Matter of Northern Lights Inc.)	See Folk- Williams, supra.	MIF(FP) — hydropower licensure on Kootenai River	_		×	
Nevada	Nevada 26. Pyramid Lake Paiute tribe; US; NV; municipalities; utility cos.; local irrigators (US & Pyramid Lake Paiute v. Truckee-Carson Irrigation Dist.)**	463 U.S. 110 (1983)	IIR, MIF(FP), PRR to Truckce & Carson Rivers, Pyramid Lake	×	×		
	CONTINUED						

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Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES* (continued)

State	Indian & Other Disputants	Citations	Issue(s)	Dispute	Manage	Dispute Management Method(s)	thod(s)
	(& case names, if applicable)			Lit.	Nego.	Nego. Ad.Adj. Legis.	Legis.
New Mexico	27. Navajo, Ute, & Apache tribes; US; NM; municipalities (New Mexico v. US)**	cert. denied 429 U.S. 1121 (1977)	FJ, PRR to San Juan River	×			
	28. Jicarilla Apache Tribe v. US**	cert. denied 444 U.S. 995 (1979)	FJ, MIF(FP), PRR to Navajo River	×			
	29. Several Pueblo tribes; US; NM; private water users (New Mexico v. Aamodt)***	cert. denied 429 U.S. 1121 (1977)	FJ, PRR to tributaries of Rio Grande	×			
	30. Mescalero Apache tribe; US; NM; local irrigators (New Mexico v. Lewis)**	88 N.M. 636, 545 P.2d 1014 (1976)	FJ, PRR to tributaries of Pecos River	×			
<u></u> -	31. Several Pueblo & Jicarilla Apache tribes; US; NM; local water users (New Mexico v. Aragon)**	Civ. No. 7941 (D.N.M., filed 3/5/69)	FJ, PRR To Chamas River	×			
	32. Navajo tribe; US; several energy devel. cos. (<i>Peshlakai v. Schlesinger</i>)	CV No. 78- 2416 (D.D.C. 1978).	Impact of proposed uranium devel. on surface & G; PRR(G)	×			
	CONTINUED				Ì		

Survey completed 3/82; updated 4/88. **One of several suits filed in this dispute. Key to issue symbols: FJ=forum jurisdiction; FP=fisheries protection; G=groundwater; IIR=Indian interest representation; MIF=maintenance of instream flow; PC=pollution control; PRR=perfection of reserved rights; RO=riverbed ownership.

Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES* (continued)

State	Indian & Other Disputants	Citations	Issue(s)	Dispute	Manage	Dispute Management Method(s)	thod(s)
	(& case names, if applicable)			Lit.	Nego.	Nego. Ad.Adj. Legis.	Legis.
New Mexico (cont)	33. Navajo tribe; US; NM; uranium devel. co.	See Folk- Williams,	PC(S&G) from uranium tailings spill into Rio Puerco	×			
	34. Acoma & Laguna Pueblo tribes, US; NM; municipality (Pueblo of Laguna & Acoma v. City of Grants NM et al.)	CIV. No. 1540-HB (D.N.M., 12/30/82).	PC(S) — municipal sewage pollution of tribal water supply from Rio San Jose	x			
Oregon	Oregon 35. Klamath tribe; US; OR; private water users (US v. Adair)**	478 F. Supp. 336 (D.Orc. 1979).	FJ, PRR(FP) to Williamson River	×			
South Dakota	36. Several Sioux tribes; US; SD; municipalities; local irrigators (South Dakota v. Rippling Water Ranch)**	531 F. Supp. 449 (D.S.D. 1982).	FJ, PRR to Missouri River basin in western SD	×			
	37. Yankıon Sioux Tribe v. Nelson	cert. denied 107 S.Ct. 3228 (1987)	RO, Lake Andes (tributary to Missouri River)	×			
Utah	38. Utc Indian tribe; US; UT; (Ute Indian Deferral Agreement of 1965; Ute Indian Water Compact)	Utah Code Ann. L&SC Title 73-21-2 (1980)	PRR to waters of Uinta Basin, facilitating Central Utah Project		×		×
	CONTINUED						

Survey completed 3/82; updated 4/88. **One of several suits filed in this dispute. Key to issue symbols: FJ=forum jurisdiction; FP=fisheries protection; G=groundwater; IIR=Indian interest representation; MIF=maintenance of instream flow; PC=pollution control; PRR=perfection of reserved rights, RO=riverbed ownership.

Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES* (continued)

State	Indian & Other Disputants	Citations	Issue(s)	Dispute	Manage	Dispute Management Method(s)	(s)poq
	(& case names, if applicable)			Lit.	Nego.	Nego. Ad.Adj. Legis.	Legis.
Wash.	39. Yakima Indian tribes & bands; US; WA; local irrigators & private water users (Holly v. Yakima Indian Nation)	cert. denied 108 S.Ct. 85 (1987).	FJ, PRR to Yakima River	×			
	40. Colville Confederated tribes, US; WA; private water users (Colville Confederated Tribes v. Walton)**	cert. denied 454 U.S. 1092 (1981).	FJ, PRR to No Name Creek, limits on conveyance of reserved rights	x			
	41. Spokane tribe; US; WA; lumber co. private water users (US v. Anderson)**	cert. denied 450 U.S. 920 (1981)	FJ, MIF(FP), PRR to Chamokane Creek	×			
	42. Lummi tribe; US; WA; local water users; (US v. Bel Bay Community & Water Ass'n.)**	See Folk- Williams, supra.	FJ, PRR(G) in Nooksak River Basin	×			
	43. Swinomish, Sauk-Suiattle, and Upper Skagit tribes; US; WA; Seattle (Swinomish Tribal Community v. FERC)	627 F.2d 499 (D.C. Cir. 1980)	MIF(FP) — hydropower licensure on Skagit River	×	X	_	
	44. Muckleshoot tribe; US; utility co. (Puget Sound Power & Light v. FERC; Muckleshoot Tribe v. Puget Sound Power & Light)	cert. denied, 454 U.S. 1053 (1981)	& damages — hydropower licensure on White River	x			
	CONTINUED						

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Table 1. CONTEMPORARY INDIAN WATER RIGHTS DISPUTES* (continued)

State	Indian & Other Disputants	Citations	Issue(s)	Dispute A	fanageme	Dispute Management Method(s)	(3)
	(& case names, if applicable)			Lit.	Vego. Ad	Nego. Ad.Adj. Legis.	zis.
Wash.	45. 19 tribes & bands inhabiting Olympic Peninsula & mainland west of Cascade Mins.; US; WA; commercial & sports fishermen (US ν. Washington)**	cert. denied 454 U.S. 1143 (1982)	FJ, MIF(FP), PC PRR to watersheds draining western Cascade Mtns. & Olympic Peninsula	×			
	46. Puyallup Tribe of Indians v. Port of Tacoma	cert. denied; 465 U.S. 1049 (1984).	PC, RO(FP), Puyallup River	×			
	47. Skokomish tribe; US; WA; utility co.	See Folk- Williams, supra.	MIF(FP) — hydropower licensure on south fork, Skokomish River			×	
	48. 8 tribes & bands inhabiting Puget Sound area; US; pipeline developers (Lower Elwha Tribal Community et al. v. Reagan)	520 F.Supp. 334 (W.D. Wash. 1981)	PC(FP) — impact of oil pipeline const. & maint. on Puget Sound fishery				
Wyo	49. Shoshone & Arapaho tribes; US; WY; private water users (In re Adjudication of the Big Horm River Basin).	See Folk- Williams, supra.	FJ, MIF(FP) PRR of Wind River Reservation to Big Horn River Basin	×			
	END						

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Table 2. VOTING BEHAVIOR OF U.S. SUPREME COURT JUSTICES ON INDIAN WATER RIGHTS CASES

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CASE	Ari:	Ariz. v.	Ö	Colo. R.	Ari	Ariz. v.	Mont	Montana v.	Ari	Ariz. v.	Pyr.	Pyr. Paiute	Ariz. Caı	Ariz. v. San Carlos			
JUSTICE	373 U	Calif. 373 US 546	Dist. 424 L	Dist. v. US 424 US 800	Calif. 439 U	Calif. (1979) 439 US 419	US (450 L	US (1981) 450 US 544	460 L	Calif. 460 US 605	v. T 463 U	v. TCID 463 US 110	Ap: 453 U	Apache 453 US 545	TOTALS	ALS	SUPPORT FREQUENCY
	Pro	Con	Pro	Con	Pro	Con	Pro	Con	Pro 1	Con	Pro	Con	Pro	Con	Pro	S	İ
Blackmun			×		×		×		×			X	Х		5	-	.83
Brennan	×			×	×		×		×			×		×	4	3	.57
Burger				×	×			×		×		×		×	-	5	.17
Marshall				×			×					X	×		2	2	.50
O'Connor										×		×		X	0	3	00.
Powell				X	×			X		×		X		X	1	\$	71.
Rehnquist				×	×			×		X		X		x	1	\$.17
Stevens			×		×			Х	X			×	×		4	2	19.
White	×			×	×			×		×		X		X	2	5	.29
TOTALS	2	0	7	6	7	0	6	5	۳. د	5	0	6	3	9	20	31	Av39
SUPPORT		1.0		.25		1.0		.37		.37		0:00	.33		.39	6	