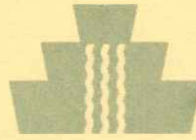


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Settlement of Indian Water Rights, a Priority Issue

A concern for Indian water rights has come to be one of the nation's most important water resource issues. Its importance is demonstrated by the fact that Indian water rights claims are presently being adjudicated in almost every western state. These rights are usually very senior and also unquantified. How conflicts over these claims will be settled will affect water use and management throughout the West.

The parties affected by water rights conflicts have different objectives. Tribes are interested in securing and using their rights as a means of achieving economic self-sufficiency, furthering tribal sovereignty, and maintaining cultural pluralism. Non-Indian water users seek to safeguard long-established water uses and remove uncertainties about future water entitlements. States wish to assert state authority and responsibility for water allocation and to preserve the integrity of state water laws and administrative systems. The federal government has many interests. Along with its trust responsibilities to Indian tribes, the federal



Tobono O'Odham ollas, or clay water jars. c.1900 (Photo from Arizona Historical Society, Tucson.)

government is also involved with such issues as environmental protection, commitments to users of federal project water, and responsibilities to minimize the financial burdens placed upon the nation's taxpayers.

Further, the nation is moving into a new era in the management of its water resources. A new emphasis on stretching existing water supplies through better management to satisfy growing water needs is apparent. Federal water resource development activities have diminished, and new cost-sharing and other rules are in place, which shift much of the burden of large-scale water development from the federal to the state and regional level. Much of the

initiative has passed to states and other sub-federal entities as well. Tribes have become more active politically and more competent technically. Above all, a new flexibility has appeared in our water allocation and management institutions, as water transfers and water marketing become increasingly common.

However, the development of these new water policies often means that the various interests—Indian, agricultural, industrial, urban—are competing for limited water resources. Society is faced with the problem of mediating their conflicting claims to determine the most beneficial uses of limited water resources.

Resolving Indian water rights conflicts within this context of multiple aspirations and viewpoints has been extremely difficult. Litigation has settled few claims definitively, and negotiation and legislation have been only slightly more successful. All parties share a common interest in finding better and more lasting ways of settling these disputes.

Since the flows of many western rivers are fully claimed, recognition of any additional rights, such as Indian water rights, could only come at the expense of established water users or existing claimants. The challenge facing Indian tribes and non-Indian water users in the West is to examine all possible pathways to move from simplistic supply reallocation solutions to alternative arrangements in which all can benefit.

Overview of Indian Water Rights

The primary basis of Indians' claims to water is the doctrine of reserved rights. In 1908, the United States Supreme Court, in *United States v. Winters*, held that Indian reservations were entitled to enough water to satisfy the purposes for which the land was originally reserved from the public domain. The priority date of the water right is the date the reservation was established. Also, unlike other appropriative water rights acquired under state law, the usual precondition that water be diverted and applied to one of a few "beneficial uses" does not apply, and Winters rights cannot be forfeited through non-use.

Although this decision by the Supreme Court firmly placed Indian water rights within the legal framework of the prior appropriations doctrine, little guidance was provided by either the court or the federal government to western states as to how these rights could be integrated

into western water allocations. The doctrine of prior appropriation is the prevailing system for establishing water rights in the West and is best summarized by the aphorism, "First in time, first in right." The first to beneficially use water has the highest priority. Further, if water is not used continuously, the right can be declared abandoned or forfeited. Accompanying the development of this doctrine has been an historical deference on the part of the federal government to state laws.

Spurred on in part by the prior appropriations doctrine which encouraged expansive water development, the rapidly growing Western states fully allocated water resources in many areas to non-Indian settlers. This rapid development was facilitated in a large measure by the Reclamation Act of 1902. The Act enabled large water storage and delivery projects to be constructed, opening vast areas for non-Indian irrigation and settlement.

However, because most of the Indian reservations were created in advance of extensive non-Indian settlement, Indian rights are generally senior to rights held by non-Indian water users. For example, the priority date for the water rights of the Gila River Indian Community is 1869, a time when the rivers in the area flowed freely and when the area was sparsely populated and little irrigated.

Indian water rights still remain largely unused and unquantified. While the Winters doctrine established a place in Western water law for Indian reserved rights it also explicitly excepted these rights from the limiting safeguards of the prior appropriation doctrine, particularly the exclusion of the rights to loss through non-use. Although these rights were first recognized in 1908 Indian tribes, in general, have lacked the capital to put the water to use, and unlike non-Indian western settlers, have received little support from the federal government in the

development of adequate water supplies.

In Arizona and other western states, until recent years, very little federal money or technical support was provided to develop water supplies for Indian tribes. Even efforts designed to benefit Indian tribes—such as the construction of Coolidge Dam—have often provided substantially more to non-Indian neighbors. At times these efforts have actually provided Indians with no benefits at all, as was the case with the Tat Momoliak Dam built for the Tohono O'Odham as a recreation facility. It now holds only inches of water and has provided no benefits to the tribe.

As a consequence, Indian claims were easily ignored and the development of non-Indian water supplies could continue unfettered with only a limited recognition that Indian rights would someday have to be recognized. But as long as these extensive tribal water rights claims remain unresolved, western states and their non-Indian water users face uncertainty in their plans to manage and use water.

Practicably Irrigable Acreage

Although the Winters doctrine established the legal foundation for Indian water claims, it left several important issues unresolved. Even after a number of court cases, questions concerning the nature and scope of Indian water rights remain. These questions include: What sources of water can Indian tribes claim? Can the reserved rights doctrine be applied to groundwater? Can Indians lease water for use by others off the reservation? And most importantly for the western states and non-Indian water users: How much water are the Indian tribes entitled to?

To date, the U.S. Supreme Court has recognized only one standard for quantification—practicably irrigable

acreage (PIA). In 1963, in *Arizona v. California*, the Court allocated the waters of the lower Colorado River. In addition to determining the water rights of the states of Arizona, California, and Nevada, the court also quantified federal reserved rights of five Indian reservations along the Colorado River and other federal rights. In quantifying the Indian rights, the court granted the reservations enough water to irrigate all practicably irrigable acreage within their boundaries. This quantification standard is known as practicably irrigable acreage (PIA). Under this standard, five Indian reservations were granted approximately 900,000 acre-feet of water. Arizona also received rights to 2.8 million acre-feet of water, but future Indian claims to Colorado River water must be met by Arizona's allotment.

Although the Special Master's report, upon which the Court decision was based, was careful to point out that PIA might not be the most appropriate standard of quantification in all cases, it remains the most authoritative statement to date quantifying Indian water rights. The use of the PIA standard in the Wind River adjudication in Wyoming was recently upheld, albeit narrowly, by the Supreme Court in June 1989. The Court tied 4-4, with Justice O'Connor abstaining, leading some to speculate that the issue will be visited again by the Court.

Despite judicial recognition of PIA, limitations to its use have been debated since *Arizona v. California*. The reliance on PIA is to the disadvantage of reservations located in rocky, mountainous regions, with land unsuitable for irrigation, such as the White Mountain Apache Reservation. The Apaches would gain little by a strict use of the PIA standard compared to reservations with large amounts of agricultural land along the Salt or Gila Rivers, such as the Gila River Indian Community, which claims over 1.5 million acre-feet of water based upon the PIA standard.

The PIA formula is also criticized because it seems to recognize only agricultural development as a purpose of the reservation, ignoring other potential tribal economic activities, such as municipal, recreational and energy-related development. Although unidentified by the PIA formula, these activities may provide greater tribal economic benefits than agriculture.

Finally, the extensive application of the PIA formula is undermined by a basic and elementary fact: Not enough water resources are available in the West to satisfy all Indian water claims based on a PIA standard. PIA-based Indian water claims in the West could amount to approximately 45.9 million acre-feet per year. This, in effect, represents approximately 3.5 times the average annual flow of the Colorado River.

Arizona would be the state most greatly affected by Indian water rights awards based on PIA standards. Approximately 25 million acres of Arizona, or one-third of its land area, is held in trust by the federal government for the state's Indian tribes. The potential PIA-based claims of all Arizona tribes are estimated to be between 10 to 30 million acre-feet of water per year, many times the state's entire supply.

Adjudication

In recent years most western states have initiated efforts to quantify the rights of Indian tribes. State officials are in agreement that Indian water rights questions must be resolved before western water rights are broadly settled. The settlement of a claim can be accomplished through litigation, negotiation or legislation. Each represents a different strategy, an alternate or complementary route to the same goal of settlement. Which strategy or strategies are best and most effective

to secure just settlements have been discussed and debated.

Although some western states have established various administrative procedures and special water courts to settle conflicts over water rights, general stream adjudications of water rights are the most common and comprehensive method in which to settle competing claims to water rights. Most often, general stream adjudications are initiated by non-Indians to force quantification and reduce uncertainty. Courts may combine several suits into a general stream adjudication in which the reserved and private water rights to an entire watershed are determined.

An adjudication of water rights is a special kind of lawsuit that determines the type, the amount, and the priority date of the right of every water user in a particular watershed. The court will decide whether or not a water user has a legal right to use water, and then the quantity and the priority of that right. A final decree establishes the relative rights of all the parties, including those of the federal government and the Indian reservations.

Such adjudications are now in progress in Arizona for the Gila River and Little Colorado River watersheds. First initiated in 1978, the two adjudications will eventually determine the water rights of most water users in the state, including Indian tribes and the federal government. Eleven tribes have filed claims in the Gila River watershed, the principal watershed in Arizona incorporating the state's two largest population centers, Tucson and Phoenix. The Little Colorado adjudication involves the Hopi and the Navajo, the latter Arizona's and the nation's largest tribe.

The adjudications will eventually settle the claims of the Indians and others in the state, but they are monumental undertakings. The Gila River Adjudication is estimated to be the largest lawsuit ever filed in the United States, affecting 60,000 parties.

Because of the complexity, the pace of the proceedings has been slow.

The Gila River Adjudication court has made preliminary rulings on some of the more complex issues facing the court, including: 1) that groundwater in general is not appropriable, making an exception only when pumping can be shown to importantly and almost immediately affect surface flows; and 2) that Indians reserved rights can apply to appropriable groundwater. However, both these rulings may be appealed to the State Supreme Court, then possibly to the U.S. Supreme Court.

The federal government, the state of Arizona, the Indian tribes and non-Indians are participating and will participate in the adjudication at various levels. The following sections discuss some of the responsibilities of the federal, state, and tribal entities.

The Role of the Federal Government

The federal government's most prominent responsibilities in the adjudication are to represent tribal interests in securing water rights and to press for other federal claims. Other federal entities who have filed claims in the adjudication include the Departments of Agriculture, Defense, and the Interior.

The federal government is a large, multifaceted organization, whose separate components often have different and even conflicting responsibilities. The federal government's ability to represent Indian interests effectively in water rights litigation while simultaneously representing the interests of federal agencies, departments and offices, has been questioned.

Some of the important questions that have been raised are: Could the Department of Interior activities on behalf of Indians be affected by the interests of other federal agencies,

say the Army Corps of Engineers? Or can agencies even within the Interior Department—the Bureau of Reclamation or the Fish and Wildlife Service, for example—influence federal advocacy of Indian interests in the light of their own concerns? These are worrisome issues to many observers.

In defending Indian water rights, the federal government also works to quantify the amount of water to be claimed. The controversial, though precedented, PIA standard was applied to Indian reservations in Arizona by the Bureau of Indian Affairs (BIA). The BIA contracted such specialists as soil scientists, agronomists, economists, agricultural engineers, and hydrologists to determine PIA areas on each reservation.

However, both the government and the tribes themselves have filed claims that are not based upon PIA. Also claimed is water needed for such reservation uses as domestic, mining, forestry, fire fighting, industry, and recreation and tourism. In fact, a broad view of the Winters doctrine is being taken to include any activity that a tribe might engage in to economically develop its reservation.

The Role of Arizona State Government

The state of Arizona has multiple roles in adjudication. Along with its judiciary duties, the state is involved in adjudication through the activities of the Department of Water Resources (ADWR). Usually concerned with enforcing state water laws and issuing permits, ADWR has taken on a different role in adjudication. The agency is acting as a technical arm of the court, gathering information and conducting field work to determine the justification of all water claims, Indian and non-Indian. ADWR is not, however, part

of the decision-making process, neither ranking nor quantifying competing claims. Such decisions will be made by the judge.

ADWR's responsibilities include developing hydrographic survey reports (HSR), with two types of HSRs being prepared. One type of HSR is being developed for each of the principal tributary watersheds of the Gila River and is mainly concerned with the claims of non-Indian water users.

Separate HSRs are being prepared for Indian reservations to reflect the specialized water claims made by tribes. For example, Indian claims include water for irrigation based upon PIA. ADWR will therefore study the agricultural potential of the reservations. Soil analysis will be done; irrigation needs evaluated; viable crops identified; yields and returns estimated; capital costs computed; etc. Further, reservation HSRs will review various hydrologic, engineering and economic considerations that may influence the quantification of water rights by the courts.

The state is also defending its own water rights in adjudication. The Arizona Attorney General's office represents all state agencies with water rights, including the Arizona Game and Fish Commission and the State Parks Department and is also defending water rights on all state trust lands.

Of equal interest is a mention of whom the state does not represent in Indian water rights litigation or negotiations—its citizens. Unlike some other states, Arizona lacks the authority to represent state water users in the settling of Indian water rights claims.

By providing funding to support negotiated settlements, however, the state does protect the interests of non-Indian water users. For example, the state contributed \$5 million to a tribal development fund as part of the Salt River Pima-Maricopa water rights settlement. By allocating the funds, the state is

facilitating a settlement to resolve uncertainties facing Indian and non-Indian water users within the state.

The Role of Tribal Governments

Indians do not make up a single bloc or a unified position in the adjudications. As mentioned, 11 tribes are involved in the Gila River adjudication and two tribes in the Little Colorado River adjudication, each with differing views and positions taken toward the proceedings. More importantly, each of these reservations also has differing needs and objectives to accomplish through the pursuit of water supplies, whether through the adjudication or through negotiated settlements, or some combination of the two. In essence, each tribe will develop its own strategy for settling its water rights claims.

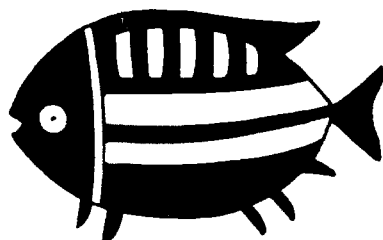
Tribes can voluntarily participate in the adjudication proceedings for, if they do not, their water rights will still be litigated by the federal government acting as their trustee. A tribe that voluntarily participates makes a formal motion to intervene in the proceedings. If the motion is granted, the tribe becomes a party to the proceedings, with the court having jurisdiction over it. The Navajos, Hopis, San Carlos Apaches, Tonto Apaches, and Gila River Tribe have followed this course of action.

Other tribes are not participating in this manner since they have not made formal motions to intervene in the proceedings. Instead, they rely mainly on the U.S. Department of Justice to represent their interests. Tribes may follow this strategy for a variety of reasons. For example, a tribe may lack funds to become more formally involved; or a tribe's priority may be to resolve its water claim through negotiations, rather than adjudication; or a tribe may dispute the authority of a state court to

determine its water rights.

Adjudication has provided an incentive for tribes to negotiate their claims rather than trust solely to the legal proceedings. Tribes that are presently considering negotiations include the Gila River Indian Community, the Fort McDowell Tribe and possibly the San Carlos Apaches.

Only the White Mountain Apaches are actively boycotting adjudication. They consider it flawed and illegal, subject to later judicial invalidation. Despite this position, however, the tribe is being represented by the U.S. Department of Justice in the adjudication.



Mimbres pottery design of sunfish

Negotiation

Although most parties believe that the adjudication is essential to improving water management in the state, not all agree that it is the most appropriate method for settling Indian claims. Some Indians and most non-Indians argue that negotiated settlements, ratified through legislation, can better address the problems surrounding the settlement of Indian water rights claims. These negotiated and legislated settlements are usually the product of lengthy negotiations at the local level and then extensive congressional action.

A chief complaint against the adjudication process is that it requires great amounts of time and money. Cases can drag on for twenty or more years, while lawyer fees mount for all

parties. The Gila River adjudication is estimated to run for at least 20 years at a total cost of many millions of dollars.

Another frequently cited problem with litigation is that the results are often unsatisfactory for many water users who participated. For example, the recently completed Wind River Adjudication in Wyoming involved an estimated \$75 million, with a cost to the state of \$40 million, and some of the parties have resorted to informal negotiations because they found the impacts of the ruling to be unacceptable.

Others cite the complications that can arise when the courts, operating in a vacuum and separate from other important water policy decisions, become the sole determinants of water rights. Tribes and other parties in the conflict thus lose some control over the proceedings and the eventual resolution, as a judge makes the crucial decisions. Also, state courts have had the authority to adjudicate Indian claims only since 1984, and tribes are apprehensive about the expertise and the objectivity of state court systems. Federal courts, in particular, have been kinder to Indians than have state courts or state or federal legislatures.

Further, litigation tends to work out situations according to legal definitions of the issues and rigid procedure rather than the real interests of the parties. As a result, complex issues are not always comprehensively addressed, nor is there the flexibility that a less structured procedure would allow. Marketing opportunities, temporary transfers of water to ease re-allocations, and augmentation of existing supplies are among some of the significant options the courts cannot consider.

However, preparing for litigation, even if a suit is never filed, may serve a valuable purpose for a tribe. Litigation can act as an incentive or, more bluntly stated, as a threat to get the defendants to the bargaining

table. For the O'Odham, a lawsuit was the initial step toward establishing negotiations, the process that eventually settled the tribe's water claims.

Rather than relying solely upon litigation, tribes and other concerned parties may choose to negotiate an Indian water rights settlement. In negotiations, either with the assistance of a professional mediator or without, representatives of all affected parties, both Indian and non-Indian, must work out a settlement of mutual benefit. The resulting settlement can then be ratified by the court through stipulation.

Negotiation can be an attractive option to resolve Indian water rights claims for several reasons. Negotiations often take less time than judicial proceedings, and generally are less expensive. Further, negotiations can work on a gathering of issues, addressing a broad and comprehensive agenda. The Salt River Pima-Maricopa Indian community's recently completed negotiations included settlement of most, if not all, issues that made up at least seven pending lawsuits.

Also, more comprehensive benefits are possible through negotiations. Judicial decisions are limited to a consideration of amounts of water and relative priority dates. Through negotiations the Tohono O'Odham established their water claim and ensured the flow of water, with sources and amounts clearly identified. They also were awarded substantial funds to assist in the development of the water supplies. Additional negotiated benefits included financial support to operate and maintain the system to deliver the water, as well as funds to improve irrigation systems on the reservation.

Finally, rather than the adversarial, destructive relationships that often result from a lawsuit, negotiations are more likely to encourage constructive, engaging interactions—no insignificant advantage.

Indian Water Rights Settlements in Arizona

A number of Indian water rights conflicts have been settled in Arizona through the use of negotiated legislative agreements. In 1962 an early Indian water rights claim in Arizona was settled with the Navajo Tribe over its rights to the San Juan River. Later, three other Arizona tribes have settled their water rights claims through negotiated legislative settlements: the Ak-Chin Indian Community, the San Xavier and Schuk Toak districts of the Tohono O'Odham Reservation and the Salt River Pima-Maricopa Indian Community.

The Ak-Chin Indian Community first settled its water rights claims in 1978. Problems arose, however, with the proposed water supply and the settlement was renegotiated in 1984. The new agreement allocated 75,000 acre-feet of water and a total of \$43 million for compensation, agricultural development, and flood protection.

The Ak-Chin community is to be supplied 58,000 acre-feet of CAP water, with the remaining water coming from resources previously contracted to the Yuma-Mesa Division of the Gila Project. The division is to receive \$11.7 million worth of benefits from the federal government in exchange for relinquishing its claim to the water. Further, a trust fund of \$2 million was established to enable state and industrial users to purchase agricultural water in low CAP water years.

Researcher Susanna Eden at the University of Arizona Water Resources Research Center analyzed the Ak-Chin settlement to identify factors that promoted a satisfactory resolution of the dispute. She found that the major participants were well prepared for and highly committed to negotiations, with each perceiving that their positions would be very much improved by a settlement.

These factors significantly contributed to the success of the negotiations.

Another settlement, this one with the Tohono O'Odham, involved allocating 76,000 acre-feet of water. The 1982 settlement also provides approximately \$21.5 million to construct and rehabilitate reservation irrigation systems and for a trust fund to support on-reservation development. The allocation of water to the tribe includes CAP water, some limited use of groundwater, and water to be obtained by the Secretary of the Interior through an exchange of effluent provided by the City of Tucson. Local non-Indian water users and the state are contributing about \$3 million and \$2.5 million respectively to the trust fund. The federal government is bearing the balance of the cost.

The 1988 agreement negotiated with the the Salt River Pima-Maricopa Indian community is particularly complex. It involves a number of water transfers and leases between water users in the Phoenix area, including the cities of Phoenix, Chandler, Mesa, and Scottsdale, and the Salt River Project (SRP) and other water providers. The reservation was allocated 122,400 acre-feet of water and approximately \$67 million to establish a trust fund for on-reservation development and for past Court of Claims payments due the tribe. The water the reservation is to receive includes stored SRP water, groundwater, CAP water and water from the Roosevelt Water Conservation District. Costs to local non-Indian water users are estimated to be \$16 million and the economic worth of about 30,000 acre-feet of water.

Involved and complex, the Salt River settlement has been the focus of various research projects. For example, researcher Ken A. Rait, natural resources research specialist in the UA Department of Agricultural Economics, identified what he believes are two constraints of the Salt River settlement that will affect

the Indian community's flexibility to use its water. He expresses concern that, since the settlement set the community's per-acre water allocation at an amount considerably less than the allocation to farmers in the Phoenix Active Management Area, the reservation will not be able to achieve the purposes for which it was created. The second constraint he discusses is how the settlement limits the community's opportunities to market its water.

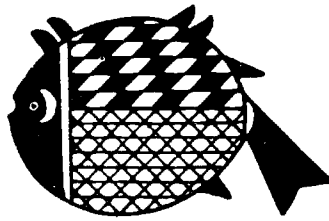
The above descriptions of specific Indian water rights cases demonstrate that the negotiated settlement of Indian water rights claims is a complex and lengthy process. As a result, despite certain advantages, negotiations are often difficult to initiate, conduct, and implement. The advantages of negotiations would be more evident and, therefore, more accepted if better information were available about this process and the variables that affect its outcome.

A UA research team headed by William B. Lord, professor of hydrology and water resources, Lucien Duckstein, professor of systems and industrial engineering, and assistant research anthropologist Thomas R. McGuire has developed a framework to facilitate the negotiations of Indian water rights conflicts. The researchers chose the San Pedro River Basin, an area involved in the Gila River adjudication, as a case study.

Adopting an interdisciplinary approach, the researchers investigated various and interrelated factors involved in negotiations—hydrologic, environmental, anthropological, economic, legal, political, and psychological. Each of these disciplines or factors influence the course of negotiations; hence, the study's multidisciplinary methodology. To analyze the information the researchers used a variety of linked models.

Through the use of economic, hydrologic, and game theoretic models, the impacts of the various options on the parties were explored.

This modeling allowed the researchers to predict how various allocation plans of water and money would affect the river and the disputants in the controversy. The preferred options were then identified to resolve the conflict. The project demonstrated a methodology for providing the information required to make negotiations of water rights disputes easier and more productive.



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Legislation

Thus far, congressional action has been limited to the ratification of individual negotiated Indian water rights settlements. These settlements have required Congressional approval because they contain substantial federal funding and because of the federal government's trust responsibility for Indian tribes. Congressional approval is also considered insurance against later challenges to the legality of a settlement. Such disputes could very possibly arise since Indian water rights settlements are very complex legal agreements, with many parties of diverse interests often involved.

Along with approving negotiated settlements, Congress could take a more active legislative role by proposing and enacting new laws to facilitate Indian water claim settlements. Clearly this would be an effective way to resolve various troubling and controversial matters relating to Indian water rights. However, there is little agreement

within the Congress on the fundamental issues involved, and no comprehensive federal legislation is likely to emerge soon.

Conclusion

Many observers are heartened by the progress they believe is being made to resolve Indian water claims. There have been eight major settlements since 1982, with possibly another eight to be submitted to Congress next year for its approval. Also, as noted earlier, most western states are presently adjudicating water rights in a further effort to resolve Indian water claims. Much remains to be done, however, with many claims to be settled and major issues to be resolved.

For Arizona, a number of key issues are on the horizon. The most significant may be what sources of water will be used to settle Indian claims. In the settlements to date, a key component of each settlement has been the acquisition of water from sources that are now unutilized or underutilized, such as effluent or surplus Colorado River water. There has been no reallocation of water, but there have been transfers among users for which the original water rights holders have generally been amply compensated.

The challenge facing the state is to apportion available water supplies among various uses, including the settlement of Indian claims, in a manner that is both equitable and efficient. Some sources of water that may be used for the settlement of Indian claims include non-CAP Colorado River water, CAP water, effluent, and irrigation district waters. Obviously, though, any consideration of use of these sources of water to settle Indian claims must take place outside the context of the adjudication.

Another important issue to be resolved is whether public policy

should encourage Indian off-reservation water leasing. Arguments on both sides of the question have been advanced. Some argue that reserved water rights are to directly benefit on-reservation projects and activities, and not to provide an indirect benefit through off-reservation leasing. Others, who support tribal off-reservation water leasing, argue that it allows tribes the full benefit of their water and advances their self-sufficiency. Congressional approval is necessary before Indian tribes may undertake the off-reservation leasing of Indian water. Thus far, however, Congress has directly authorized only the Tohono O'odham to lease its water as part of its water claims settlement.

In sum, however, Indian and non-Indian water users alike have made considerable progress toward settling Indian claims and toward establishing a dialogue between the parties. As water rights disputes are essentially conflicts between neighbors, the new spirit of cooperation, if it lasts, is welcome.

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