Fall 1991

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Cover Page Footnote
International Law; Commercial Law; Law

This article is available in North Carolina Journal of International Law: https://scholarship.law.unc.edu/ncilj/vol16/iss3/11
The Transfer of Water from an International Border Region: A Tale of Six Cities and the All American Canal

Albert Utton*

What are the international legal implications of transferring water from an international border region if that transfer adversely affects users on the other side of the international boundary? This question is being raised in the U.S.-Mexico border region and creates interesting questions in light of the 1944 Colorado River Treaty.¹

I. Introduction

A zero sum game is being played in the arid southwest. A game in which if someone wins, someone else has to lose. The players are the United States and Mexico in the larger sense, but more precisely, it is a tale of three pairs of cities. The real players in this high stakes game are: Phoenix and Tucson, Arizona; San Diego and Los Angeles, California; and Mexicali and Tijuana, Mexico. Phoenix is growing rapidly in the Arizona desert (Arizona aptly meaning arid zone in Spanish). Tucson until recently was the United States’ largest city totally dependent on groundwater.² Los Angeles and San Diego, both of which are located on California’s southern coastal plain, are faced with the prospect of a collision between dynamically expanding populations and the loss of over one-half of their Colorado River water supplies to Arizona.³ In Mexico, the city of Mexicali, located in the Colorado River Basin, has temperatures which exceed 100 degrees fahrenheit for more than 100 days per year and receives less...

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³ River of Controversy, Western Water, July/August 1985, at 7.
than three inches of rainfall per annum. Its growth rate exceeded 2,011% between 1940 and 1970. Tijuana relies on Colorado River water via a transmountain aqueduct, and its population doubled or tripled during each decade from the 1930s to the 1970s. Both of these Mexican cities have a population of approximately one million people and continue to grow rapidly.

Arizona has now begun to take its allocation decreed by the U.S. Supreme Court under the twenty-five year old Arizona v. California decision. In the intervening years, Los Angeles and San Diego have come to rely upon the "surplus" of Arizona's entitlement which went unused by Arizona. Originally, Los Angeles and San Diego could depend on 1,212,000 acre-feet of Colorado River water per year. Now, these two cities are losing 662,000 acre-feet of the Colorado River water they had come to depend on and consequently are having to adjust to only 550,000 acre-feet per year of their vested entitlement. To adapt to this shortfall, the Metropolitan Water District, which supplies both San Diego and Los Angeles with water, has searched for other sources. It found what appeared to be a perfect candidate, the All-American Canal, which is located entirely within United States national territory. The canal parallels the U.S.-Mexican border, and delivers precious Colorado River water to the nearby half-million irrigated acres of the Imperial Irrigation District (IID), the largest single user of Colorado River water. The All-American is unlined as it heads due west through the Sonora Desert, and it "loses" through seepage substantial amounts of the water that begin the journey to the IID.

By lining the All-American and part of the Coachella Canal, which branches off the All-American, it is estimated that 100,000 acre-feet of water could be saved each year that would otherwise be lost. By modern alchemy, water would be created from desert sand. However, currently the water is not actually lost; apparently, much of it simply percolates and migrates underground across the international boundary where it is used by Mexicans to irrigate

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6 Id. The 1980 census figures were 510,664 for Mexicali and 461,257 for Tijuana.
7 Arizona v. California, 373 U.S. 546 (1963). The Supreme Court accepted the division of the Colorado River water as allocated by the Secretary of the Interior. Until the present time, California has received a surplus of the Colorado's water because Arizona lacks the physical facilities to take its fair share under this case, entailing a loss for California.
8 Draft Water Conservation Plan, supra note 4, at ES2.
9 Metropolitan Water District of Southern California, Statement of Dec. 8, 1986 [hereinafter Statement of the Metropolitan Water District].
10 Sudman, supra note 2, at 4.
20,000-30,000 acres of farmland. It serves as a supplemental supply for agriculture to compensate for the increasing amounts of water being taken by Mexicali and Tijuana to supply the demand of their dramatically growing populations.

One Mexican official fears that "if this thing [the lining] goes through, it will mean the end of the Valle." The Valle de Mexicali, an extension of the California's Imperial Valley, is one of Mexico's most productive agricultural areas. Perhaps as many as 700 Mexican wells have been put down to recover water lost from the All-American Canal. The fear is that the lining of the canal will interrupt the recharge of the aquifer which supplies the water for the wells irrigating thousands of acres of Valle de Mexicali farms.

In the United States, officials are strongly rejecting the Mexican claim. One official is quoted as stating, "[w]hat we are saying is that the United States government considers the waters in the All-American Canal to be United States waters, diverted to the United States under the 1944 [Colorado River] Treaty. The United States has the right to take whatever measures it wants to conserve those waters." Another U.S. official is quoted as saying, "[e]ven under international law, any country can improve its public works, such as lining a canal, without being considered to harm another country."

If in fact significant reductions in groundwater supply occurred in Mexico as a result of the proposed lining, what would be the legal ramifications? This Article will examine this question in light of the 1944 Colorado River Treaty and the ways in which the Treaty can be interpreted through varying applications of the doctrines and principles of general international water law and western water decisions. This Article will then conclude that although the water in question is Colorado River water and therefore is governed by the Treaty, it is not clear that the United States can legally intercept the seepage water because: (1) the Treaty fails to address the groundwater question; (2) western water law decisions indicate that the courts have sought accommodations that give some protection to users of "seepage" water; and (3) the international law of prescription may apply. This lack of clarity, combined with considerations of international

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11 Statement of Metropolitan Water District, supra note 9, at 1. For additional articles describing the current state of the Colorado River and the vast demands placed upon it, see McDowell & Woodbury, A Fight over Liquid Gold, Time, July 22, 1991, at 20; Carrier, The Colorado: A River Drained Dry, Nat'l Geographic, June 1991, at 4.
12 See supra notes 4 & 5.
13 Interview with Roman Calleros, Director of the Mexicali Office of the College of the Northern Border (Feb. 1990)[hereinafter Calleros Interview]; see also N. Y. Times, Oct. 1, 1989, at 3, col. 1.
14 Calleros Interview, supra note 13.
15 Id.
16 Id.
comity, should lead the United States to search for an accommodation which would be a "win-win" position for both countries.

II. Putting the Treaty into Context

The international legal dimension of the proposed lining of the All-American Canal is governed by the specific provisions of the 1944 Colorado River Treaty. Nonetheless, it is helpful to put that Treaty into context by first examining the general international law principles within which the Treaty fits.

A. International Law Principles

1. The Development of Territorial Sovereignty Theories

a. Initial Stages

During the development of international water law over the course of the past century, the theory of absolute territorial sovereignty, which held that a nation could act within its own territory without regard to the consequences of the act to neighboring nations, has been rejected. This theory has been replaced by the doctrine of limited territorial sovereignty. Under this doctrine, a nation is prohibited from using water resources within its boundaries in a way which would unreasonably damage its neighbors.

The development of the doctrine of limited territorial sovereignty followed a similar development of the common law. The Roman maxim *sic utere tuo ut alienum non laedus* (so use your own property as not to injure your neighbor) was perceived as the foundation of the common law of nuisance by Sir William Blackstone in the early nineteenth century. Likewise, international law has followed a similar development in the case of transboundary pollution. Heading the list of international judicial decisions in this area is the oft-cited *Trail Smelter* decision, which builds on the same principle of *sic utere tuo* for international streams and lakes.

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18 *The Law of International Drainage Basins* (Garretson, ed. 1967).
19 Blackstone illustrated with the examples that one cannot keep hogs or other "noisom animals" so near another’s house "that the stench of them incommodes him and makes the air unwholesome" nor can one "corrupt or poison a water course by erecting a dye-house or a lime pit for the use of trade in the upper part of the stream." Blackstone not only based the principle on the Roman maxim, but the biblical exhortation as well: "So closely does the law of England enforce that excellent rule of gospel morality of ‘doing to others as we would they should do unto ourselves.’" 3 William Blackstone, *Commentaries on the Laws of England*, 217-18 (Garland Publishing 1978)(9th ed. 1783).
INTERNATIONAL WATER RIGHTS

The Trail Smelter case dealt with international air pollution, but is analogous to the pollution of international streams and lakes. A smelter at Trail, British Columbia, was causing damage across the border in the United States. After hearing the case, the arbitral tribunal held "that, under the principles of international law no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another . . . when the cause is of serious consequence and the injury is established by clear and convincing evidence."  

b. The Current Stage: Equitable Apportionment

In the case of international water resources, the principle of limited territorial sovereignty was a founding principle upon which the more comprehensive concept of equitable apportionment (or utilization) was erected. Under equitable apportionment, each co-riparian is entitled to an equitable share of the uses of the water of a river system. Griffin further developed the limited territorial sovereignty principle by using the language of equitable utilization in declaring that "riparians are entitled to share in the use and benefits of a system of international waters on a just and reasonable basis." Nearly a decade later, Lipper, in summarizing the conclusions of the New York University International Rivers Research Project, stated that international authority "endorses the limited sovereignty principle which embraces equitable utilization, as it is sometimes termed equitable apportionment, with respect to both contiguous and successive international rivers."

From the vantage of the last decade of the twentieth century, one can reasonably conclude that international practice, as evidenced by treaties, judicial decisions, statements of individual scholars, and private and public international bodies, has rejected the assertion of absolute territorial sovereignty in favor of the principle of limited territorial sovereignty. This principle, in turn, has been refined and is currently expressed in terms of the doctrine of equitable apportionment or utilization. Under this doctrine, a co-riparian of an international water system cannot unilaterally use or divert water so as to injure another riparian. Instead, the co-riparian must share the use of international water as the waters must be equitably


22 The tribunal itself said, "[n]o case of air pollution dealt with by an international tribunal has been brought to the attention of the tribunal . . . . The nearest analogy is that of water pollution." 35 AM. J. INT'L L. 684, 714 (1941).

23 Id.

24 Griffin, supra note 21, at 77-79.

apportioned or utilized.26

The Helsinki Rules,27 the most recognized expression of the international law of rivers, reflect this development. The Helsinki Rules assume limited territorial sovereignty and are founded on the principle of equitable utilization or apportionment. Article IV provides that "[e]ach basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin."28 Furthermore, article V follows the lead of earlier judicial decisions by elaborating: "[w]hat is a reasonable and equitable share within the meaning of Article IV is to be determined in the light of all the relevant factors in each particular case."29

2. Other Principles from Practice: Aquifers and Groundwater

A more limited international practice exists in the area of transboundary aquifers, yet by analogy, in light of the international and interstate law of rivers, it can be said that:

1) no one party is entitled to all of the waters of a transboundary aquifer;
2) the use of the waters of the aquifer must be equitably shared by those parties which overlie it; and
3) no one party may unilaterally determine its share.30

In 1986, the International Law Association adopted specific rules dealing with groundwater.31 Article 2(1) provides that, "[a]n aquifer that . . . receives water from surface waters of an international basin constitutes part of that basin for purposes of the Helsinki Rules."32 This in turn makes the Helsinki Rules specifically applicable to groundwaters, as article IV provides that, "[e]ach basin State is entitled within its territory to an equitable share . . . of the waters . . . of an international drainage basin."33

3. The Colorado River Treaty and the Question that Remains

In the specific case of the Colorado River, the United States and

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26 Schwebel, supra note 21, at 74.
28 Id. at 486.
32 Id. at 259.
33 Id.
Mexico have determined, by mutual and amicable agreement, the “reasonable and equitable” share of each country. By treaty, 1,500,000 acre-feet per year was allocated to Mexico, while the other waters in the Colorado River drainage basin were allocated to the United States.\(^{34}\)

The groundwaters in the Mexicali Valley are return flows or seepage water from the Colorado River. Accordingly, the United States is correct in its assertion that the Colorado River waters have already been allocated by mutual agreement under the 1944 Treaty. Nevertheless, one question remains: even if the source of the groundwater is the surface flow from the Colorado River, and even if this surface flow has been allocated, does the United States have the right to interrupt return flows by lining the canal, thus enabling it to recapture seepage waters upon which Mexican farmers have developed a dependency and corresponding expectancy over the course of several decades?

In search of the answer to this question, western water law cases provide some illumination by providing some degree of insight as to the manner in which decision-makers have responded to somewhat similar questions in the past.

\subsection{U.S. Water Law: Analogies}

\subsubsection{Land Owners and Conservation Measures}

In various U.S. jurisdictions, owners have used waters resulting from their conservation measures, thus claiming to have benefitted merely from the fruits of their labor. At first glance, this proposition seems reasonable enough in light of the added advantage of providing an incentive for land owners to invest in conservation measures. However, courts have often disapproved of these measures when considering the “bigger picture” of the entire hydrologic cycle of the river.

For example, in \textit{Southeastern Colorado Water Conservatory District v. Shelton Farms, Inc.},\(^{35}\) the parties reduced evaporation and evapo-transpiration by clearing phreatophytes and filling in marshy land. They claimed that because their efforts had resulted in the conservation of water, this water should have been theirs to use, free from the call of other water users in times of water shortages. The Supreme Court of Colorado rejected the claim, holding that “since the water in question has always been tributary to the stream and was not new to the river system, it must come under the general system or priorities of

\footnote{\(^{34}\) The Mexican allocation is delivered in accordance with annual schedules formulated by the Mexican section of the International Water and Boundary Commission before the beginning of each calendar year. \textit{See Treaty Respecting Utilization of the Colorado and Tijuana Rivers and the Rio Grande}, supra note 1, arts. 10, 15.\(^{35}\) 187 Colo. 181, 529 P.2d 1321 (1974).}
water rights for the river system." 36 In effect, the court said that they had to consider the effect of the loss of return flows to other water users downstream.

In Salt River Valley Users Association v. Kovacovich, 37 the Arizona Court of Appeals similarly rejected a claim for the use of water saved by conservation measures. Here an owner conserved water by the improvement and concrete lining of ditches. The owner wanted to use the conserved water for irrigating immediately adjacent lands. He argued that a decision prohibiting his usage of the water would otherwise "result in penalizing persons who, through their industry, effort and expenses, engage in water saving practices." 38 The court said that "[c]ertainly any effort by users of water in Arizona tending toward conservation and more economical use of water is to be highly commended. However, commendable practices do not in themselves create legal rights." 39 The court went on to say, "[a]ny practice, whether through water-saving procedure or otherwise, whereby appellees may in fact reduce the quantity of water actually taken inures to the benefit of other water users and neither creates a right to use the waters saved as a marketable commodity nor the right to apply same to adjacent property having no appurtenant water rights." 40

In general, the cases reflect rather technical considerations relating to the doctrine of prior appropriation and the water law of the particular jurisdictions. Consequently, that which can be usefully gleaned and transferred by analogy is limited. Nevertheless, at a minimum, these cases do reflect the kinds of concerns decision makers will consider. These courts felt the need to consider the overall hydrologic cycle, possible environmental effects, and the impacts on other users downstream in the drainage system. The courts were concerned that by "conserving" the water and putting it to further use, return flows would be reduced and there would be less water available for other users downstream. The end result was that the individual water right holder was not allowed to conserve water and then use that water himself. At least in this area, one is not guaranteed to benefit from the fruits of one's own labor.

2. Transfers of Place of Use

United States water law relating to the transfer of water rights from one place to another is also instructive. A leading case is Farmers Highline Canal and Reservoir Co. v. City of Golden. 41 In this case, the

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36 Id. at 1324.
38 Id. at 29, 411 P.2d at 202.
39 Id. at 29-30, 411 P.2d at 202-03.
40 Id. at 31, 411 P.2d at 204.
41 129 Colo. 575, 272 P.2d 629 (1954)(en banc).
City of Golden purchased water rights and "sought to have changed, not only the point of diversion, but likewise, the manner of use." 42 The water right involved had previously been used to divert water from a ditch (Swadley Ditch) for irrigation, and the City of Golden now wanted to move the point of diversion five miles downstream to the headgate of another ditch (Church Ditch) to increase the domestic water supply for the city. The Supreme Court of Colorado clearly declared that the basic principle to be considered in such an application for transferring the place of diversion and use of water is whether other users will be injured by the change given the hydrologic interdependencies of a water system.

[W]ell established, as we have repeatedly held, is the principle that junior appropriators have vested rights in the continuation of stream conditions as they existed at the time of their respective appropriations, and that . . . they may successfully resist all proposed changes in points of diversion and use of water from that source which in any way materially injures or adversely affects their rights.43

The court went on to quote with approval one of its earlier decisions, saying "[t]he well-recognized right to change either the point of diversion of the water right or its place of use is always subject to the limitation that such change shall not injure the rights of subsequent appropriators."44

The principle difficulty with which water transfer cases have to deal is the complex hydrologic interdependencies of all users in a water system.

Since the same water can be used and reused by several persons, all may have water rights that entitle them to receive the same molecules of water. If the sale and transfer of one person's water right will result in making those molecules unavailable to another who also has a right to them, the first user has sold the latter's water as well as his own.45

State courts have acted accordingly. For example, the Supreme Court of New Mexico has held that a water rights holder can change the point of diversion "only if it can do so without detriment to the rights of other water users on the stream."46 Wyoming requires that transfers of water rights not be granted if the transfer would "in any manner injure other existing lawful appropriators."47

In comparison to the All-American Canal lining, one observes

42 Id. at 577, 272 P.2d at 630.
43 Id. at 579, 272 P.2d at 631-32.
44 Id. at 580, 272 P.2d at 632 (quoting Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 116 Colo. 580, 586, 183 P.2d 552, 555 (1947)).
that these cases protect only the holders of water rights and therefore are not strictly relevant to the Imperial Valley situation because the only right to Colorado River water which Mexico has is the right to 1,500,000 acre-feet under the 1944 Treaty. However, these cases illustrate, in a broader sense, the manner in which the same molecule of water is reused many times by different users and how the law jealously protects those subsequent users by prohibiting transfers that would interrupt the hydrologic sequence and thus the water supply.

3. The Reuse Water Cases

Raising similar considerations is another line of cases which attempt to deal with the reuse of discharge or drainage waters. These cases are similar in some aspects to the transfer cases even though they have developed from a slightly different perspective. For example, in the Oregon case of *Cleaver v. Judd*,48 the defendant, an irrigation district, built a drain to alleviate drainage problems caused by irrigation in the community. After the drain was built, the plaintiffs used the drainage waters for irrigation. Some years later, the irrigation district constructed a ditch to capture the drainage water for reuse within the district. The plaintiffs sued to enjoin diversion of the drainage water for reuse within the district. In finding against the plaintiffs, the court held that "if the waste and seepage water is recaptured for reuse within the boundaries of the district, those who have previously used such waters have no cause of action for having been deprived of the water."49 The court cited an earlier California case50 for the principal that water may be "subsequently recaptured so long as the recapture is effected before the water leaves the owner's land or that of the irrigation district."51 The court basically established that the interception and reuse of drainage water was permitted if it was: 1) recaptured before it left the land of the owner, and 2) used on the land of the owner. Furthermore, the Colorado case of *Comstock v. Ramsay*52 added that drainage flows cannot be intercepted and reused on different land.

If one tried to apply these cases to the Mexicali situation, one might suggest the recaptured seepage water would have to be reused within the Imperial Irrigation District or at least within the Colorado River drainage basin; otherwise, all return flows would be lost. One would have to emphasize that these cases obviously did not contemplate an international situation where the owner is a nation. How-

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48 238 Or. 266, 393 P.2d 193 (1964)(en banc).
49 Id. at 271, 393 P.2d at 195.
51 *Cleaver*, 238 Or. at 272, 393 P.2d at 196.
52 55 Colo. 244, 133 P. 1107 (1913)(en banc).
ever, a Wyoming case provides language friendly to the Mexican position. In *Fuss v. Franks*, the Supreme Court of Wyoming declared:

> the owner of land upon which seepage or waste water rises has the right to use and reuse—capture and recapture—such waste waters for use only upon the land for which the water forming the seepage was originally appropriated. When the water leaves the land for which it was appropriated and would, if left to flow uninterrupted, reach a natural stream, it becomes eligible to other and separate appropriation for other and different uses. It leaves the landowner from which it has escaped, without any superior right to such water.

In another case, yet another limitation was added as it was held that the intent to recapture must have existed at the time of appropriation, and that the intent must be exercised within a reasonable time.

The need to exercise the intent to recapture is even more explicit in the Supreme Court decision in *Ide v. United States*, which not only has strong echoes for the All-American Canal situation, but also appears to provide support for the United States position. In this case, the U.S. Supreme Court held that the government had the right to recapture and impound seepage water. The United States had constructed a canal system through the Bureau of Reclamation. In spite of the fact that the waters in question had leaked from the canals, the Court held the water could be recaptured. It held that water once lawfully in the possession of the United States may, in the absence of an intent to abandon, be prevented from escaping or may be recaptured while escaping. However, this case does not provide the solace for the United States position that it at first appears to. Even though this case ruled for recapture, it raises the question of abandonment. The question of abandonment is raised when non-use for a sufficiently long time is coupled with an intent to abandon. The abandonment is a rebuttable presumption. The rebutting party must demonstrate intent to put the water to beneficial use and provide some reason explaining the non-use.

Mexico could be expected to argue that the United States has

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53 610 P.2d 17 (Wyo. 1980).
54 Id. at 20.
56 263 U.S. 497 (1924).
57 Id. at 506.
58 Abandonment was also raised in the 1919 Colorado case of McKelvey v. North Sterling Irr. Dist., 179 P. 872 (Colo. 1919)(en banc). In that case the irrigation district sought to prevent the escape of water from its irrigation ditches, and the plaintiff had been using the escaped water. The court ruled that there was a right to recapture the water unless the water had been abandoned. Id. at 874.
abandoned the seepage water from the All-American Canal. The U.S. would surely counter that it had not intentionally abandoned the water, but at all times had intended to recapture the water when it was needed, which it now is. But the fact that the United States has not put the water to beneficial use for forty eight years would cast doubt on the robustness of U.S. intent.  

These contentions are made in light of the observation that the cases invariably involve an established downstream user who has become dependent on the drainage flow, and who is trying to prevent the interruption of the flow. A California case, *Krieger v. Pacific Gas and Electric*,  

provides yet another wrinkle to this classic struggle. Here, Krieger owned land which was subject to an easement for the right-of-way for the Utica ditch. When Pacific Gas and Electric acquired the water right, it began to line the ditch by “gunniting” or spraying it with liquid concrete. Krieger sought an injunction to stop the concrete lining and the court agreed. The court said the earthen ditch constituted the limit of the original easement. They held that the riparian vegetation which depended on the seepage from the earthen ditch was a benefit enjoyed by the landowner. Thus, the loss of the seepage would increase the burden of the easement. The court declared “the water flowing in the ditch is the property of PG&E, and [Krieger] has no right to the water; however, water which percolates leaks or seeps through the ditch to [Krieger’s] property thereby becomes his property.”

One can say a number of things about these cases. They come from a variety of jurisdictions and reflect the technical legal factors of those respective jurisdictions, including the respective constitutional and legislative environments of each jurisdiction. They also represent an attempt to accommodate the equities and needs of the original appropriator from whose land the water seeps or drains and those of the user downstream who now relies upon the continuation of those flows. The courts, in reaching this accommodation, recognized the expectations for continued flow of seepage waters and placed limits on when and where seepage waters may be intercepted and recaptured. The key word throughout the cases would be “accommodation.”

### III. Groundwater Under the 1944 Colorado River Treaty

The 1944 Treaty specifically allocates a quantity of the surface flow of the Colorado River to Mexico each year. Furthermore, the

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62 Id. at 149, 173 Cal. Rptr. at 758.
Treaty provides that Mexico is granted an annual quantity of 1.5 million acre-feet per year "from any and all sources" with the understanding that "Mexico shall acquire no right beyond" the specified 1.5 million acre-feet "of the waters of the Colorado River system, for any purpose whatsoever." Although this language seems explicit and all-inclusive, upon closer review there is room for doubt in the clarity of its interpretation. The reason is that even though it was known that there were substantial supplies of groundwater in Baja, California hydrologically related to the surface flow of the Colorado, the Treaty is silent regarding the effect of Mexican uses of these groundwater reserves. Meyers has three separate contentions regarding this ambiguity: first, "the negotiators apparently never considered whether the United States should be given credit for groundwater utilized by Mexico . . ."; second, the proponents of the Treaty during the ratification hearings "did not . . . appreciate the possible effects of extensive Mexican use of groundwater"; third, the proponents may have "realized that the Treaty contained a major defect which had to be glossed over at such a late date." The result is that although the language of the Treaty allocating a specific quantity of the surface flow is quite explicit, the Treaty is not clear because the negotiators, and therefore the Treaty, did not address the question of groundwater and the question of rights to seepage water from the All-American Canal.

Outside of the Treaty issues, the international doctrine of prescription should be considered. If the Treaty does not cover the issue, or is unclear, which it is, then the doctrine of prescription might be argued. Brierly says "long possession may operate to confirm the existence of a title the precise origin of which cannot be shown or to extinguish the title of a prior sovereign." Hall adds that "title by prescription arises out of a long continued possession where no original source of proprietary right can be shown to exist, or where possession in the first instance being wrongful, the legitimate proprietor neglected to assert his right or has been unable to do so." This is the concept of "adverse possession which is recognized by almost all systems of municipal law and appears equally to be admitted by international law."
The international law cases cited which apply to the acquisition of land should be equally applicable to the acquisition of other property rights such as water rights. Certainly, the International Court of Justice in the Anglo Norwegian Fisheries case\(^\text{72}\) in dictum appeared to recognize that prescription could apply to acquire title over areas of the high seas. Prescription under international law has strong echoes of abandonment. Perhaps the long usage by Mexico of the seepage waters of the All-American Canal might arguably create a prescriptive right to the continued flow of these groundwaters.

IV. Conclusion

While both Mexico and the United States may be able to make strong claims to the seepage waters of the All-American Canal, the right to intercept seepage flows is less than clear. The basic legal document governing U.S.-Mexico water rights in the Mexicali area is the 1944 Treaty. The Treaty equitably apportioned the use of the Colorado River waters, and Mexico was allocated 1,500,000 acre-feet per year. Mexico receives this water for distribution at Morelos Dam. Accordingly, it can be argued that any additional seepage water from the Imperial Irrigation District (IID) would increase the Mexican allocation beyond that agreed upon by the Treaty in view of the fact that the water supply of the IID is Colorado River water and a portion of the United States’ agreed-upon allocation. If the question in the All-American Canal case concerns Mexican user rights to a continuance of the underground flow, then it may be argued that the only water right Mexico retains is the share of surface flows allocated under the 1944 Treaty. However, this may not frame the question broadly enough in view of the value of comity in U.S.-Mexico relations, the dependency developed by expanding Mexican needs,\(^\text{73}\) and competing legal doctrines.

The United States might choose to stand on the letter of the law of the Treaty and simply contend that “we have delivered that much to Mexico in the bed of the Colorado; the water in All-American Canal is our agreed upon share, and we therefore can line the Canal to save our share for reuse as we see fit.” Nevertheless, significant questions are raised by U.S. water law, the fact that the Treaty does not address groundwater, and perhaps the international law of prescription. A survey of U.S. western water reveals that U.S. courts have protected other users in the case of the transfer of water rights and have placed limits on the recapture of seepage waters from irri-


\(^{73}\) A distinguished Mexican scholar anticipated this problem nearly three decades ago when he wrote, “[t]he 1944 Treaty actually froze at a very low level, irretrievably perhaps, Mexican rights in these waters by not providing for the growth of communities that later might need the water downstream in Lower California or in Sonora.” Sepulvida, Areas of Dispute in Mexican-American Relations, 17 Sw. L.J. 98, 102 (1963).
gation canals. Here again, it reasonably can be argued that this body of law does not apply to an international water case which is governed by treaty. Yet, to ignore the reluctance of the U.S. courts to cut off return flows would be to ignore their sensitivity to interrupting the flow of water to those who have become dependent on its continued supply.

Under United States case law, even though the original water right holder had the prior right, the junior appropriators of the seepage water were protected. They generally were water rights holders; their rights were formally recognized by the appropriate procedure in that jurisdiction. However, those protected were not always holders of formal water rights, as was seen in the *Krieger* case. In that case, the court specifically held that Krieger had no water right, but nonetheless stopped the defendant from lining the Utica ditch, thereby intercepting the seepage water. The clear thrust of these cases is to provide some protection to users of seepage water and to place limitations on when the holder of a water right may capture and reuse or transfer water which he had the prior right to use, but which has now moved on through seepage to other users.

In the capture and reuse situation, some cases have imposed additional conditions, such as an intent to recapture both at the time of appropriation and within a reasonable time. The Treaty has been in effect more than four decades and the Imperial Irrigation District itself has been in existence more than seven decades (since 1911). The policy reason behind requiring the recapture within a reasonable time is the maximization of the beneficial use and reuse of the same molecules by protecting junior appropriators who put the water to beneficial use. Otherwise, the investment necessary to put the water to beneficial use would not be justified because the water supply would be unreliable if it were subject to being intercepted and interrupted by recapture. This "reasonable time" condition could provide support for the Mexican position. It might be argued that recapture now, nearly fifty years after the canal began supplying the

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74 As were the junior appropriators in Cleaver v. Judd, 238 Or. 266, 393 P.2d 193 (1964), and in Fuss v. Franks, 610 P.2d 17 (Wyo. 1980).

75 See supra notes 61-62 and accompanying text.

76 The reuse cases require seepage water may be "recaptured so long as the recapture is effected before the water leaves the owner's land." *Cleaver*, 238 Or. at 272, 393 P.2d at 196. In this instance, it might be argued that the IID would have to conserve and recapture the water within the bounds of the irrigation district. Conservation measures such as lining ditches will easily satisfy the requirement. However, in the larger international treaty context the appropriate geographic area would be the bounds of the country not the irrigation district. Therefore, the capture of the water would clearly be within the water right holder's land, i.e. the United States. The same considerations would also apply to the requirement that the reuse has to be on the owner's land. The use would be in the United States and, therefore, permissible from the larger perspective of the Treaty (although outside the Colorado River drainage basin therefore obviating all return flows). Sudman, *supra* note 2, at 8.
full needs of IID in 1942, is not reasonable. Specifically, the issue would be raised of whether the United States had abandoned the right to recapture the seepage especially in view of the fact that the Mexicans have made substantial investments in the interim and have come to rely on the seepage as a supplemental supply.

The Imperial Irrigation District proposal involves elements of both the law of reuse and the law of transfer; the key concept is one of the capture of seepage water and the transfer of that Colorado River water outside the drainage basin to California coastal areas. A central element of the law of recapture and reuse is accommodation, and the thrust of the law of transfer is that changes in the place of use "shall not injure the rights of subsequent appropriators." It can be argued that this general policy to protect other water users in the case of transfers and in the case of seepage waters or return flows is limited to water rights holders, and that the only right Mexico has is the 1,500,000 acre-feet under the Treaty. However, this very question, the question of the extent of the Mexican right to groundwater, would be a central issue in dispute due to the failure of the Treaty to address groundwater rights.

Of course there are many exceptions, and Trelease cautions that the second user of water is not protected against its loss in every case of change in the manner and form of its first use. Certainly these western water cases do not have a binding effect on the All-American Canal case; yet, the reuse cases do wrestle with the same issue between neighboring domestic users that the All-American case presents between neighboring nations.

In summary, both the United States and Mexico could make substantial legal arguments. Each could insist on a decision based on the letter of the law. The United States clearly has a strong argument based on the allocation of surface waters under the Treaty, even though groundwaters were not comprehended within the explicit language of the Treaty. On the other hand, Mexico could mar-

77 Of course there are many exceptions, and Professor Trelease cautions that "the second user of water is not protected against its loss in every case of change in the manner and form of its first use," Trelease, supra note 45, at 99. He points to two examples in which the second user is not protected. In the first case a municipal sewage treatment plant had discharged effluent above the headgate of an irrigation company. A new plant was built with its outfall downstream from the irrigation company's point of diversion. The Colorado court held that the company had no vested right of control over the upstream appropriation and that a change in the point of return to the stream is not subject to a no harm rule. Metropolitan Denver Sewage Disposal Dist. No. 1 v. Farmers' Reservoir and Irr. Co., 179 Colo. 56, 499 P.2d 1190 (1972). Trelease also points to A-B Cattle v. U.S., 196 Colo. 539, 589 P.2d 57 (1978). In this so-called "dirty water case," the irrigators using the Bessemer Ditch complained that naturally muddy water of the Arkansas River which helped seal the ditch from leaking had been replaced by clear water from a reservoir by the Bureau of Reclamation. This caused the ditch to leak and less water to reach the irrigators. The court held that the irrigators had a water right and not a "silt right" and denied their claim to compensation.

78 See Trelease, supra note 45.
shall strong support from case law in the United States itself. This support includes the following: 1) the requirement not to injure other users, as illustrated by the conservation and transfer cases; 2) the requirement that the recapture and reuse of seepage waters must be effected within a reasonable time; and 3) the proposition that seepage waters are presumed abandoned if not recaptured within a reasonable time.

It would be difficult for the United States to argue that it had been economically impossible to line the Canal during the nearly half century of non-use in view of the relative cost of the project compared to the gross national product of the nation. Non-use over the course of a long period of time creates a presumption of the intent to abandon. This presumption is rebuttable and therefore the issue certainly is debatable. Without attempting to answer the question of whether there has been abandonment, the circumstances at a minimum might suggest that "the United States does not have a clear right under American law to line the All-American Canal to the detriment of Mexican farmers who have put the water to beneficial use for 25 years." 79

In addition to these issues from western water decisions, Mexico could argue the ambiguity of groundwater under the Treaty, plus possibly the establishment of a prescriptive right due to Mexico's long use of the water combined with the non-use in the United States. Abandonment and prescription are cousins—one focuses on long non-use, the other on long use.

Perhaps the most important lesson we can learn from the cases is that they fundamentally reflect a general need to reach an equitable accommodation between those who seek to recapture "lost" seepage waters and those who have become dependent on their use. This surely has to be the case in the All-American Canal situation. We should seek to avoid a damaging conflict over these seepage waters. We should seek an equitable accommodation if, in fact, it is determined that the proposed conservation and transfer of waters of the Imperial Irrigation District would adversely affect groundwater users in Mexico. Accordingly, suitable provisions should be made to protect the Mexican users, perhaps through water replacement measures. Neither international law nor the Treaty addresses the question directly; but the broadly recognized principles of western water law of the United States itself provide that water should be captured and transferred only if the transfer can be made "without detriment to the rights of other water users . . . ." 80

Furthermore, various steps should be taken in the proposed Imperial Irrigation District transfer. First, hydrologic studies should

79 See Hayes, supra note 60.
carefully determine whether in fact Mexican groundwater users would be adversely affected.\footnote{Hydrologic determinations are seldom simple, and all of the seepage may not reach Mexico. Therefore reliable hydrologic studies would have to be carried out which are satisfactory to both countries. Agreement on the basic factual data is a necessary first step.} If they would not be, then the question would be moot. If they would be adversely affected, then measures to mitigate the detrimental impacts, such as replacement water or compensation, should be considered. In this, what appears to be a worthy project could go forward while avoiding damage to established users across the international boundary. Instead of a zero sum game, in which one party gains only at the expense of the other party, a “win-win” approach should be sought. San Diego and Los Angeles undoubtedly need additional water. Mexicali and Tijuana undoubtedly need more water. Lining the All-American Canal undoubtedly would capture water lost to seepage. Perhaps a portion of this conserved water could be delivered directly through closed pipes, for example, to replace lost groundwater supplies and the remainder could be delivered to Los Angeles and San Diego as contemplated under the proposal. Perhaps discharge water from the planned International Sewage Treatment Plant in San Diego could be provided to Tijuana to offset losses of seepage waters from the All-American Canal. Perhaps other “creative” replacement water options could be considered. Mexican users would be protected, and coastal areas of southern California would receive additional water supplies, even if in somewhat reduced quantities.

An equally important benefit would be the avoidance of a dispute which could damage U.S.-Mexican relations. The political costs could be greater than the hydrologic gains. This consideration is particularly crucial because the two nations have common interests in a whole spectrum of issues ranging from trade to drug enforcement to energy to immigration. These issues will continue to require mutual cooperation.

Resort to legal arguments, based either on western water law decisions or international treaty interpretations, are unlikely to reach a conclusion acceptable to both nations. Rather, a negotiated agreement between the two nations should be patiently pursued. Such an approach would obtain the benefits which accompany an amicable resolution through mutual agreement. In pursuing this “amicable” approach, the hydrologic realities of supplying replacement water to Mexican users should be carefully explored.

Rather than playing a total zero sum game, we should seek ways to share the gains of the water saved by lining. Rather than the total loser of the water saved being the one upon whom the last domino falls, perhaps the water “saved” by the lining of the Canal could be...
equitably shared. Accordingly, the southern California cities would gain substantial new water even if less than the full amount they had hoped for, and the Mexican cities would not lose all of their supplemental supplies (even though they would perhaps receive less than they now do).

Perhaps rather than following a strict interpretation of the letter of the treaty law regarding surface flows, the United States would be better served in the longer run by following the wisdom of equity. As they say, “what goes around, comes around!”