*25 DAVIS v. AGUA SIERRA RESOURCES: BRINGING SOME CLARITY TO GROUNDWATER RIGHTS IN ARIZONA

INTRODUCTION

For the better part of a century, the Arizona Supreme Court played a dominant role in shaping Arizona’s approach to groundwater. From the adoption of the first territorial water code in 1864 to the enactment of the Groundwater Management Act (“GMA”) in 1980, the Arizona legislature was content to remain largely in the background, leaving some of the most important decisions about groundwater regulation to the courts. Those decisions witnessed Arizona’s transformation from a state dependent on agriculture and mining to one of the fastest-growing, most water-limited states in the West.

Although the GMA has done much to shift control of groundwater regulation to the legislature, the courts continue to affect the development of legal principles applicable to groundwater, though on a much more limited scale. In particular, since the passage of the GMA, the Arizona Supreme Court has increasingly deferred to the legislature when confronted with important decisions about the state’s limited water resources. As the court itself has remarked:

"Regulation of water use, ... especially in a desert state, does not lend itself to case-by-case definition. In this field, we not only confer private rights and interests but deal in the very survival of our society and its economy. Simply put, there is not enough water to go around. All must compromise and some must sacrifice. Definition of those boundaries is peculiarly a function for the legislature. It is plainly not a judicial task. Accordingly, we must look to the legislature to enact the laws they deem appropriate for wise use and management of what may be a valuable water resource for Arizona."

*26 The Arizona Supreme Court’s most recent pronouncement in this area, Davis v. Agua Sierra Resources, L.L.C., is the latest example of the court’s move toward placing plenary control of groundwater with the legislature. Davis involved a landowner’s attempt to sell property while reserving rights to the underlying groundwater. The case thus presented several fundamental questions of water law: What is the nature of an overlying landowner’s interest in groundwater? Is it a real property right that can be severed and transferred apart from the land? Or is it some lesser interest, appurtenant to and inseparable from the land itself? In other words, is the ability to withdraw and use groundwater a severable and transferable “stick” in the bundle of property rights?

In January 2008, the Arizona Court of Appeals ruled that rural landowners-- those outside Arizona’s regulated groundwater areas (called “Active Management Areas” or “AMAs”)--have a real property right to withdraw groundwater that may be reserved in the sale of property. The court thus upheld the claim of a former landowner who asserted the exclusive right to withdraw and transport groundwater from property that had been sold decades earlier. Such marketable groundwater rights had a short-lived existence. In a unanimous opinion, the Arizona Supreme Court overturned the court of appeals’ decision,
finding no basis in Arizona law for transferable rights to groundwater outside AMAs, at least in the absence of any pre-existing use of groundwater. The court held that landowners with no history of groundwater use have, at most, an “unvested expectancy” to groundwater. By this, the court meant that, although Arizona law currently permits landowners outside AMAs to withdraw and use groundwater, it does not give them a property interest in prospective groundwater use and, therefore, they have no “property right” that may be severed and transferred apart from the land. Displaying the deference that now characterizes its approach in water-rights cases, the court concluded that if Arizona law is to permit landowners to sever and transfer rights to the prospective use of groundwater, the legislature, not the courts, should make that decision.

The Arizona Supreme Court’s decision settles an issue of considerable importance to the parties involved and provides welcome guidance to others with an interest in Arizona’s system of groundwater regulation. In all, six different organizations, representing a wide variety of governmental and private interests, aligned in urging the Arizona Supreme Court to review the court of appeals’ decision.

Although the court’s decision brings clarity to an area of law that has historically generated confusion, it leaves a number of questions unanswered and its implications for future cases remain unclear. For instance, the decision makes clear that landowners with no history of groundwater use do not have a property interest in the prospective use of groundwater. But, what about landowners that are pumping groundwater? Do they have a right to continue their use? And if so, will government regulation that prohibits or curtails that use result in a “taking” of their property? Modern regulatory takings law requires compensation when the government regulates property to such a degree that the regulation amounts to an exercise of the government’s power of eminent domain or denies the property owner all economically viable use of their property. If current groundwater users have a protected property interest, severe restrictions on pumping could result in a compensable taking, particularly if stand-alone “groundwater rights” can be severed and transferred apart from the land.

The decision could have implications in other areas as well. For example, even though the ability to withdraw groundwater cannot be separated from ownership of the overlying land (at least in the absence of any pre-existing groundwater use), can owners of rural land nevertheless sell their property but reserve a “groundwater easement”—that is, the right to come onto the property in the future and withdraw groundwater? This question might arise, for instance, if a large tract of land were subdivided and made subject to a deed restriction that prevents owners of individual parcels from accessing the underlying groundwater and requires them, instead, to purchase their water from a designated water company or irrigation district with a blanket easement over the property to drill wells for the purpose of supplying water to the subdivision. Such an arrangement would not directly involve an attempt to sever and reserve water rights as in Davis. But it would seem to accomplish the same result by thwarting an owner’s access to the underlying groundwater and transferring that access to another entity. Although modern property law generally gives wide latitude to such private land-use arrangements, would this type of indirect evasion of Davis be permitted? This issue could become important as owners of agricultural land attempt to capitalize on the value of the underlying groundwater when converting their land from agricultural to municipal or industrial use.

To fully appreciate the decision and how it could affect these unresolved issues, it is important to understand how Arizona’s approach to groundwater has evolved over time. If the issue presented in Davis had been asked 100, 50, or even 30 years ago, the answer almost certainly would have been different.

I. ARIZONA GROUNDWATER LAW

A. Arizona’s Bifurcated System of Water Law

The Arizona legislature gets the credit—or the blame—for the amount of ink expended writing about Arizona’s “bifurcated” system of water law. Since the enactment of Arizona’s first territorial water code in 1864, the legislature has not included underground water (other than that flowing in “definite underground channels”) as a category of water subject to the doctrine of “prior appropriation.” Because of this exclusion, the Arizona Supreme Court has consistently rejected calls to subject “percolating” groundwater to the doctrine of prior appropriation and has proceeded to develop the legal principles applicable to groundwater as a matter of common law.

*29 B. The Common Law Origins of Arizona’s Approach to Groundwater
For over 150 years, American courts have been shaping the legal principles applicable to groundwater under the common law. For most of this time, controversies rarely arose over title to groundwater or a need to apportion groundwater among users, as was the case with surface water. During the common law’s formation, abundant water supplies usually made it impossible to deplete the common supply or interfere with groundwater use by others. When conflicts did develop, most states outside the West adopted one of two approaches.

The earliest approach, which was borrowed from England, treated groundwater as the absolute property of overlying landowners. Known as the English Rule or the “absolute dominion rule,” this early approach was essentially a rule of capture, permitting landowners to capture and use as much water as they could bring to the surface. The English Rule also imposed no liability when groundwater withdrawals impaired the water supplies of others, subject only to the limitation that groundwater could not be maliciously wasted. American courts following this rule were undoubtedly influenced by a desire to encourage the development of groundwater resources by permitting virtually unrestricted use of groundwater. In addition, very little was known about the science of hydrology, which made proving the impact of groundwater use on others difficult or impossible. An 1861 Ohio case is characteristic of how early courts viewed groundwater:

> [T]he law recognizes no correlative rights in respect to underground waters percolating, oozing or filtrating through the earth .... [T]he existence, origin, movement and course of such waters, and the causes which govern and direct their movements, are so secret, occult and concealed, that an attempt to administer any set of legal rules in respect to them would be involved in hopeless uncertainty, and would be, therefore, practically impossible.

Over time, the absolute ownership doctrine gave way to what came to be known as the American rule, or the “rule of reasonable use.” The rule of reasonable use arose in response to technological advances that allowed large quantities of groundwater to be withdrawn and transported over long distances. With the invention of the high-capacity pump, cities and other large water users began buying land for well fields in rural areas. Often the result was a lowering of the water table beyond the reach of the wells of neighboring farmers. The rule of reasonable use required these users to compensate farmers or provide them with deeper wells.

Although the rule of reasonable use provided protection for the wells and springs of adjacent landowners when water was withdrawn and transported elsewhere, it gave no relief to users who were harmed by a neighbor’s use of groundwater on his own land. Like the absolute ownership doctrine, the rule of reasonable use permitted each landowner to withdraw as much groundwater as could be reasonably used on the overlying land, even if such use impaired the water supplies of others. In this way, the rule of reasonable use continued to follow a “rule of capture” for groundwater used on the overlying land, thereby continuing the general policy of promoting development by permitting virtually unfettered groundwater use.

Both forms of the common law differ significantly from the doctrine of prior appropriation, which arose out of the custom and practice of gold miners in California in the 1800s. Under the doctrine of prior appropriation, earlier beneficial users are entitled to priority over later users (“first in time, first in right”), and are entitled to take their full share (or as much of it as possible) in times of shortage before any junior rights holders receive any water. In many western states, the doctrine of prior appropriation has been applied to groundwater by court decisions or legislation. Unlike the doctrine of prior appropriation, neither of the traditional common-law rules applicable to groundwater affords landowners the right to a particular quantity of water or provides a means of apportioning groundwater among competing users. Each landowner is permitted to withdraw as much groundwater as needed, subject only to restrictions against wasting water and transporting groundwater off the overlying land under the rule of reasonable use.

*31 C. The Property Rights Foundation of the Common Law

Despite their differences, both common-law rules, at least in their earliest formulations, were based on the premise that groundwater, like minerals and other subsurface resources, is owned by overlying landowners or, like wild animals, is subject to a right of capture. In keeping with this property-rights foundation, many states treated groundwater as part of the overlying landowner’s bundle of property rights. A few states, including Texas, still follow the absolute ownership rule. Because groundwater in these states is deemed owned by overlying landowners, landowners are generally allowed to convey or lease groundwater rights apart from the land. For example, in Texas, it is possible for rural landowners to lease groundwater rights to supplement their income from farming.
Even in states that follow the doctrine of reasonable use, the right to withdraw groundwater is typically treated as a severable and transferable property right, although there have been few occasions for courts to address this issue in light of the abundance of water in these states. For example, in Ohio, which now follows the reasonable use rule, the right to withdraw groundwater is recognized as “one of the fundamental attributes of property ownership and an essential stick in the bundle of rights that is part of title to property.” It follows from this that “the right to withdraw ground water is a property right that may be granted and sold to others.” Despite the transferability of groundwater rights in these states, the right itself continues to carry the inherent limitations imposed by the common law. In other words, someone acquiring a “groundwater right” in states that follow the rule of reasonable use would have no right to a particular quantity of water and would not be entitled to prevent a neighboring landowner from sinking a well and withdrawing water, even to the point of interfering with their own groundwater use.

The transfer of water rights has generally been justified on two grounds. First, the law has traditionally viewed property ownership as comprising many distinct rights and generally permits owners to convey certain rights as they see fit. For example, mineral rights may be conveyed separately from the surface estate. Second, the transferability of water rights is thought to promote the efficient use of resources by encouraging the flow of water from lower- to higher-value uses. In many western states, for example, the transfer of water rights from agricultural to municipal or industrial uses has been justified on the ground that it promotes the efficient use of water. Both of these rationales have been cited by the drafters of the Restatement (Second) of Torts as a basis for permitting the transfer of rights to groundwater.

D. Water Transfers in Arizona

These common law principles are not particularly controversial or problematic in states with abundant groundwater supplies. In Arizona, however, rural-to-urban groundwater transfers have sparked some of the state’s most contentious battles over water policy and continue to create controversy even today.

It has been noted that “[w]ater transfers have a long but limited history in Arizona.” The first significant water transfer came in 1948 when the City of Prescott established a well field on land it owned in nearby Chino Valley. Local farmers later complained that Prescott’s pumping was depleting the groundwater basin and sued to prevent any further withdrawals. The litigation culminated years later with a decision by the Arizona Supreme Court upholding the constitutionality of the GMA. A similar dispute arose out of water farming activities by the City of Tucson in the Avra Valley in the 1960s. It is reported that Tucson acquired more than 21,000 acres of land in the Avra Valley for a total purchase price of $22.7 million (or roughly just over $1000 per acre). Litigation also ensued after mining companies transported water away from rural areas, threatening the water supplies of agricultural producers.

In connection with legal challenges to these transfers, the Arizona Supreme Court issued a series of rulings in the 1960s and 1970s that severely restricted the ability of cities and mining companies to transport groundwater. In three cases known as the Jarvis trilogy, and a major decision in 1976 in Farmers Investment Co. v. Bettwy, the supreme court applied the common-law doctrine of reasonable use to severely restrict the transportation of groundwater off the land from which it was taken. These cases proved to be instrumental in bringing about major changes to Arizona’s approach to groundwater regulation, resulting in the enactment of the GMA in 1980.

The GMA established Active Management Areas (“AMAs”) where groundwater use is strictly regulated. In addition to prohibiting most new non-municipal use of groundwater within these areas, the GMA applied stringent requirements on new developments, requiring developers to demonstrate the existence of a 100-year supply of water. Although the GMA strictly regulated new groundwater use within regulated areas, it permitted most pre-existing groundwater use to continue under a system of statutory “grandfathered” rights. In addition, in areas outside AMAs, the GMA imposed few restrictions, effectively codifying the common-law rule of reasonable use by permitting groundwater to continue to be withdrawn for “reasonabile and beneficial use.” In a key compromise that enabled the adoption of the GMA, the GMA also liberalized the common law’s severe restrictions on transporting groundwater away from the site of pumping, permitting groundwater to be transported “[w]ithin a sub-basin of a groundwater basin or within a groundwater basin, if there are no sub-basins, without payment of damages” and “[b]etween sub-basins of a groundwater basin or away from a groundwater basin, subject to payment of damages.”
The GMA, however, did not put an end to controversies over water transfers. In fact, by allowing previously prohibited transfers, the GMA enabled cities to acquire land beyond the boundaries of urban AMAs solely for the appurtenant water. Several cities acquired such “water farms” in the 1980s when they believed that the Central Arizona Project would not provide enough water to support their anticipated future growth. In response to opposition from rural interests, the legislature enacted the Groundwater Transportation Act in 1991, which, along with later amendments, ended the controversial “water farm” era by prohibiting the transportation of groundwater between groundwater basins, with some exceptions. Davis arose out of one of the exceptions, a provision that allowed up to 14,000 acre-feet of water from the Big Chino sub-basin to be transferred annually by the City of Prescott. The exception also allows for historically-irrigated acres in the Big Chino sub-basin--those lands under irrigation between 1975 and 1990--to be retired and water transferred to cities and towns within the Prescott AMA.

It is notable that in all of these earlier water transfers, the city or mining company needing water purchased land as opposed to water rights. However, Arizona has long followed the doctrine of reasonable use and continues to do so outside of AMAs. Thus, if Arizona were to treat the right to withdraw groundwater as a severable and transferable property right--as the rule of reasonable use seems to permit--nothing would prevent a city from acquiring water rights instead of land. By the same token, nothing would prevent landowners from selling their land while reserving water rights or, conversely, selling their water rights while maintaining ownership of the land.

Why, then, did the Arizona Supreme Court reject an attempt to reserve groundwater rights in Davis? The answer lies in how the Arizona legislature, aided by the courts, was able to fashion a water policy that reconciles the private property rights traditionally associated with the common-law rule of reasonable use with the public interest in protecting the state’s increasingly overburdened groundwater supplies.

**E. Arizona’s Early Approach to Groundwater**

Most states in the West have rejected the common law and its policy of permitting largely unrestricted groundwater use. Some of these states have applied the doctrine of prior appropriation to groundwater, either by legislation or court decision. Other states have adopted some other form of apportioning groundwater rights to prevent overdraft conditions. Until enactment of the GMA, however, Arizona continued to allow virtually unrestrained groundwater pumping under the doctrine of reasonable use. For a time, it also appeared to accept the idea that groundwater is “owned” by owners of the overlying land and, therefore, that these owners have a property interest in the entirely prospective use of groundwater.

In the 1904 case of Howard v. Perrin, consistent with the then-prevailing common-law view, the Arizona Supreme Court characterized a landowner’s right to groundwater as one of absolute ownership: “Throughout the Pacific Coast, where the doctrine of appropriation obtains, the decisions are uniform to the effect that waters percolating generally through the soil beneath the surface are the property of the owner of the soil.”

In 1931, in the Southwest Cotton case, and again in 1953, in Bristor II, the Arizona Supreme Court refused to apply the doctrine of “prior appropriation” to restrict groundwater withdrawals. Although Southwest Cotton did not decide between the common law absolute ownership rule and the rule of reasonable use, that question was answered in Bristor II, which adopted the rule of reasonable use. In both cases, the courts appeared to accept the view that landowners have property rights to groundwater. In Bristor II, for example, the court refused to apply the doctrine of prior appropriation to groundwater (after reversing its own adoption of the doctrine a year earlier) because doing so would have threatened to shut down later users. As Bristor II explained, Southwest Cotton’s rejection of the doctrine of prior appropriation had “become a rule of property ... entitled to protection under the law as declared.”

This property-rights view of groundwater was perpetuated two decades later in Neal v. Hunt, which involved a water rights agreement closely resembling the reservation in Davis. In Neal a property owner sold a ranch in rural Mohave County but kept a portion of the ranch from which he intended to withdraw groundwater and transport it thirty miles to the City of Kingman. In a separate agreement not mentioned in the deed or recorded, the seller “reserved the water rights to the ranch ... except for enough water for the buyer to irrigate forty acres of crops.”

*Although the supreme court characterized the agreement as an attempt to reserve water rights, the agreement took a somewhat unusual form. Under the agreement, the seller was permitted to withdraw and transport groundwater solely from*
the land it still owned. At the same time, the buyer was restricted in the amount of water it could withdraw and was precluded from attempting to enjoin the seller’s withdrawal and transportation of groundwater off its own land. Thus, the agreement appears to have been an attempt to “contract around” the doctrine of reasonable use, adopted only a few years earlier in Bristor II, by preventing the buyer from complaining about any depletion of groundwater resulting from the seller’s transportation of water off the overlying land.

In any event, the supreme court characterized the agreement as an attempt to reserve water rights appurtenant to the ranch. However, the court did not address whether the reservation was valid under Arizona law but rather whether subsequent buyers of the ranch, who acquired their property without notice of the water rights agreement, were bound by it. In addressing that issue, the supreme court treated the right to withdraw groundwater as a “hereditament”--an interest in real property--which must be conveyed by deed. Because the subsequent buyers acquired their property without notice of the unrecorded agreement, the court held that they were not bound by its restrictions.

F. The Evolution From Property Rights To “Unvested Expectations”

The supreme court’s decisions through 1975 when Neal was decided suggest that the court had settled on the conclusion that the right to withdraw groundwater was a property right that could be severed and transferred apart from the surface estate. Neal itself appears to have assumed the validity of such an agreement. Moreover, in the court’s first Jarvis decision in 1969 (Jarvis I), the court canvassed several of its earlier cases, including Howard v. Perrin, Southwest Cotton, and Bristor II, and stated that “[t]he rule that the owner of land owns the water beneath the soil has been the continuous holding of this court for seventy-five years.” Technically, the decisions referenced by the court did not address the specific nature of an owner’s rights to groundwater and instead simply refused to apply the doctrine of prior appropriation to groundwater. But the court’s statement—that landowners “own” the groundwater beneath their land—implied that the court would treat the right to withdraw groundwater as a “stick” in the bundle of property rights and, by extension, as something that could be severed and transferred apart from the land. However, the court had never directly addressed the issue, and at least one case, Southwest Engineering Co. v. Ernst, cast considerable doubt on the matter.

Ernst involved a constitutional challenge to the Groundwater Act of 1948, which prohibited the drilling of most new irrigation wells within designated “critical groundwater areas.” Landowners that were denied the ability to expand their groundwater use challenged the statute, arguing that they had a protected property interest in the groundwater beneath their land and that the Act’s prohibition on new or expanded use resulted in the unconstitutional “confiscation,” or “taking,” of their property without just compensation. The case thus presented a direct challenge to the legislature’s ability to protect the state’s rapidly depleting groundwater basins. If the court were to uphold the challenge on the ground that the legislation deprived landowners of vested property rights, the requirement to pay compensation would have been a serious obstacle to any effort to regulate groundwater use.

Despite previous statements that groundwater “belongs” to overlying landowners, the court rejected the challenge by these landowners, not because it found that they lacked a property interest in the prospective use of groundwater. Instead, the court held that the legislature had the authority to restrict new groundwater use under its “police power”—the general authority of a state to promote health, safety and welfare. As the court explained, “[w]here the public interest is ... significantly involved, the preference of that interest over the property interest of the individual even to the extent of its destruction is a distinguishing characteristic of the exercise of the police power.”

Ernst can thus be read to suggest that Arizona law viewed the right to withdraw groundwater as a property right but one that may be divested (without compensation) in the exercise of the state’s police power. Under Ernst’s reasoning, as long as groundwater use has not been prohibited, a landowner could transfer the right to withdraw groundwater to someone who does not own the land. That person, however, would remain subject to the legislature’s authority to restrict or revoke its exercise in the future. So viewed, the “property right” that a landowner enjoys with respect to groundwater would be quite unlike traditional property rights, which are protected from government confiscation without compensation. The “police power” rationale employed by the court had some support in the law at the time Ernst was decided in 1955, but such support has since been fatally undermined by later cases. Specifically, in Lucas v. South Carolina Coastal Council, the United States Supreme Court rejected the argument that a state can avoid the consequences of its regulation of property simply by showing that the regulation was a proper exercise of its police power. While reaffirming its long-held view that a
state may affect property values without necessarily incurring an obligation to compensate affected landowners.\textsuperscript{100} the Supreme Court identified two situations where compensation would be required.\textsuperscript{101} If government regulation goes “too far”\textsuperscript{102} or results in a complete deprivation of “all economically beneficial uses” of property,\textsuperscript{103} compensation must be paid to sustain it.\textsuperscript{104} Lucas thus effectively overruled the “police power” rationale on which Ernst relied and raised the specter that takings liability might arise from government restrictions on groundwater use, particularly restrictions that render stand-alone “groundwater rights” without any economic value.

Although the “police power” rationale carried the day in Ernst, the Arizona Supreme Court shifted ground in its seminal 1981 decision in Chino Valley II, in which it rejected a constitutional challenge to the GMA.\textsuperscript{105} The centerpiece of the court’s opinion in Chino Valley II was its rejection of statements in earlier cases suggesting that landowners “own” the water underlying their land and that landowners therefore have a protected right to initiate new groundwater use.\textsuperscript{106} In confronting this earlier language, the court explained that, “[i]n the absolute sense, there can be no ownership in seeping and percolating waters until they are reduced to actual possession and control by the person claiming them because of their migratory character.”\textsuperscript{107} It seems clear that the court’s rejection of its earlier statements was intended to disavow any notion that landowners have vested rights to groundwater (at least those landowners not currently pumping groundwater), thus clearing the way for the GMA’s restrictions on most new or expanded uses of groundwater. However, the court left the door open, if only slightly, for the arguments made by the previous landowner in Davis.

After rejecting the fiction that landowners “own” the water percolating beneath their land, Chino Valley II characterized the rights of landowners in the following terms: “We therefore hold that there is no right of ownership of groundwater in Arizona prior to its capture and withdrawal from the common supply and that the right of the owner of the overlying land is simply to the usufruct of the water.”\textsuperscript{108}

This passage has been the subject of conflicting interpretations. The reference to “usufructory” rights could mean that landowners have no vested rights to groundwater still in the ground but only a right to groundwater after it has been withdrawn and reduced to actual possession, and not as real property but as personal property.\textsuperscript{109} On the other hand, it could mean, as the previous owner of the ranch property argued in Davis, that while landowners do not own the physical molecules of groundwater still in the ground, they do have a right to withdraw the groundwater, and this right is a vested property right. The Arizona Court of Appeals accepted the latter interpretation in upholding the previous owner’s attempt to reserve groundwater rights in Davis.\textsuperscript{110} Citing Chino Valley II, the court held that landowners have a right to the “usufruct” of groundwater and that “[t]his right (to use water associated with real property) is a property right.”\textsuperscript{111} In other words, the court of appeals treated groundwater no differently than mineral interests such as oil or gas, which can be carved out in a deed and reserved to the seller.\textsuperscript{112}

Admittedly, several lower court decisions appeared to support the court of appeals’ interpretation of Chino Valley II. For example, in Paloma Investment Ltd. Partnership v. Jenkins,\textsuperscript{113} the holder of an option to acquire the 67,000-acre Paloma Ranch (Jenkins) assigned his right to acquire the ranch to someone else but purported to reserve a share of all proceeds from future sales of water off the ranch.\textsuperscript{114} A subsequent buyer of the ranch property challenged the water-rights agreement, arguing that, as a nonparty to the agreement, it was not bound by the agreement, and because no real property interest had been reserved, Jenkins had no right to enforce the agreement against successive owners of the property.\textsuperscript{115} In upholding the agreement, the Arizona Court of Appeals addressed the nature of groundwater rights in Arizona. Citing both Neal and Chino Valley II, the court stated that the right to withdraw groundwater is a “real property interest” which may be conveyed apart from the property.\textsuperscript{116} The court ultimately recognized, however, that the interest reserved by Jenkins “[w]as not to use the water itself, the ordinary form of water rights” but rather a “royalty interest.”\textsuperscript{117} The court concluded that Jenkins’ royalty interest was a real-property right, which had been properly reserved and could be enforced against subsequent owners.\textsuperscript{118}

Despite Paloma’s characterization of the “usufructory” right to withdraw groundwater as a property right, it was equally clear or so it seemed, that the Arizona Supreme Court had squarely rejected this interpretation of Chino Valley II in several of its earlier rulings in the Gila River General Stream Adjudication.\textsuperscript{119} The Gila River adjudication is an ongoing proceeding to determine all surface water rights (including rights to “subflow”)\textsuperscript{120} in the Gila River system.\textsuperscript{121} In Gila River I, the Supreme Court rejected a challenge to the adequacy of the summons and instructions sent to property owners notifying them of their right to participate in the proceedings.\textsuperscript{122} Two categories of property owners challenged the adequacy of the summons: (1) those that were pumping groundwater at the time of the summons, and (2) those that were not yet pumping groundwater but claimed a right do so in the future.\textsuperscript{123} Both categories of landowners claimed a property interest in the future use of nonappropriable (i.e., “percolating”) groundwater and argued that this right could be impaired by a legal determination of
when underground water is appropriable (i.e., “subflow”).

Turning first to the claims of current users, the court assumed, without deciding, that these landowners have a protected property interest arising from their pre-existing use of groundwater. As to these landowners, the court upheld the summons and instructions as providing adequate notice of the proceedings and the issues to be decided. The court then addressed the claims of landowners with no history of groundwater use. Relying on Chino Valley II, the court held that these landowners had “no legally recognized property right in potential, future groundwater use” and, accordingly, no right to receive notice in the adjudication.

Similarly, in Gila River IV, the supreme court addressed a takings challenge by property owners who argued that the trial court’s adoption of an expansive definition of “subflow” unconstitutionally impaired their right to the future development and use of percolating groundwater underlying their property. The landowners argued that the lower court’s broad definition of “subflow” had the effect of permitting surface-water-rights holders to enjoin them from pumping what had previously been classified as nonappropriable groundwater, and therefore the ruling unconstitutionally infringed their “rights” to future groundwater use. Relying on Chino Valley II and Gila River I, the court rejected their claim, reiterating that these landowners have no property interest in prospective groundwater use.

II. THE DAVIS CASE

From these cases, it was a small step to the outcome in Davis. Davis arose out of a dispute involving property commonly known as the CF Ranch in the Big Chino Valley, an area that lies approximately thirty miles northwest of Prescott and outside the Prescott AMA. For decades, the Big Chino groundwater sub-basin had been identified as a potential source of water for Prescott and other communities in central Yavapai County. Attempting to capitalize on Prescott’s future need for water, the owner of the CF Ranch, Red Deer Cattle Company (“Red Deer”), sold the ranch in 1984 but purported to reserve “all commercial water rights and waters incident and appurtenant to and within the real property.” At the time the ranch was sold, however, it was far from clear that Arizona law would permit the attempted reservation. No Arizona case had ever recognized the existence of “commercial water rights,” let alone sanctioned a reservation of such rights, and several years earlier, Chino Valley II had rejected the notion that landowners have a real property interest in the prospective use of groundwater. Nonetheless, Red Deer’s owner was a Texas resident and appears to have been attempting to speculate on the value of the groundwater on the theory that Arizona, like Texas, would allow the reservation of groundwater rights, thereby permitting the sale of those rights to Prescott or another community in need of water.

Approximately twenty years after acquiring the CF Ranch, the then-owner of the ranch (“Davis”) entered into an option to sell the CF Ranch, as well as his adjacent CV Ranch, to the City of Prescott for $30 million. Prescott acquired the option as part of its plan to transport groundwater from the Big Chino Sub-basin through a thirty-mile-long pipeline to serve its growing population. Soon thereafter, counsel for Red Deer sent a letter threatening to sue Prescott if it exercised its option, claiming that rights to the groundwater beneath the CF Ranch had been severed from the surface estate and did not belong to Davis. After the city allowed the option to expire, Davis filed a complaint seeking to quiet title to the property. Relying on Chino Valley II and the Gila River cases, the superior court struck down the reservation, holding that Red Deer did not have a property interest in prospective groundwater use and therefore had no real property rights capable of being severed and reserved in a deed. The court of appeals reversed, holding that the reservation was valid under Arizona law.

In a unanimous opinion authored by Justice Bales, the supreme court vacated the court of appeals’ opinion and held that the attempted reservation was invalid. Like the court of appeals, the supreme court focused on Chino Valley II, but it drew a very different conclusion about what the case held: Chino Valley II used the term “usufruct” to describe the rights of landowners with respect to underlying groundwater. But Chino Valley II’s use of that term does not mean that landowners have some vested real property right in the potential use of groundwater. Rather, as Chino Valley II makes clear, the landowner’s right is perhaps better described as an unvested expectancy insofar as it concerns the potential future use of groundwater that has never been captured or applied. This is why this Court concluded in Chino Valley II that the restrictions on groundwater use under the GMA did not unconstitutionally infringe the rights of landowners.
Because Red Deer had “not identified any pre-existing or current use of the groundwater underlying the CF Ranch,” the court concluded that it had no “vested real property right” that could be severed and reserved in a deed.\footnote{263}

The court also disagreed with the court of appeals’ narrow reading of 
\textit{Gila River I} as a case that dealt only with rights to surface water, concluding that the case had rejected the notion that landowners that were not currently using groundwater have a “property right in potential, future groundwater use.”\footnote{264} 
\textit{Gila River I} proved to be significant because it made it difficult to argue that landowners have property rights in groundwater, even if those rights are subject to regulation under the police power. This argument had carried the day in 
\textit{Ernst},\footnote{265} and the court of appeals also appeared to accept the argument in upholding the reservation, concluding that the previous owner had reserved “whatever commercial groundwater rights might be associated with the property.”\footnote{266} In refusing to take this approach in 
\textit{Gila River I} and again in 
\textit{Davis}, the supreme court was likely responding to \footnote{267} changes in the law, most notably in \textit{Lucas}, that precluded use of the “police power” rationale to justify depriving an owner of property rights without compensation.\footnote{268}

The court also found it significant that, in authorizing municipalities to transport groundwater from the Big Chino sub-basin into the Prescott AMA, the GMA required a city or town either to own land in the sub-basin or to obtain the “consent of the landowner” to transport water off its land.\footnote{269} The statute provides:

\begin{quote}
A city or town that owns land consisting of historically irrigated acres in the Big Chino sub-basin ... or a city or town with the consent of the landowner, may withdraw from the land for transportation to an adjacent initial active management area an amount of groundwater determined pursuant to this section.\footnote{270}
\end{quote}

The court noted that this section “presumes that a landowner has authority to consent to a city or town’s withdrawing water from the land for transportation,” which would not be the case “if a prior owner could reserve and sever from the land the rights to the potential future use of groundwater.”\footnote{271}

Finally, the court acknowledged that “there are many policy arguments for or against allowing the transfer, outside of AMAs, of rights to prospectively use groundwater,” but it concluded that “those arguments should be weighed by the legislature if it thinks it desirable to amend this aspect of the GMA.”\footnote{272}

\section*{III. GROUNDWATER LITIGATION AFTER DAVIS}

\subsection*{A. Rights of Current Groundwater Users}

The supreme court’s opinion in 
\textit{Davis} confirms the transformation of Arizona groundwater law begun by the court in 
\textit{Chino Valley II}. It also makes clear that, at least in the absence of any pre-existing use of groundwater, landowners do not have a property interest in groundwater. But is the same true for landowners that \textit{are} pumping groundwater? Do current groundwater users have vested rights? 
\textit{Davis} did not address this issue,\footnote{273} and thus the decision does not foreclose the possibility that landowners have a protected right to continue their existing groundwater use. It also leave open the possibility that government regulation that curtails or prohibits existing pumping could result in the “taking” of property rights for which compensation must be paid.

The GMA largely avoided this issue by “grandfathering” existing uses.\footnote{274} The issue could become important, however, as grandfathered irrigation rights are diminished over \footnote{275} time under the Act’s progressively restrictive conservation requirements.\footnote{276} It could also become significant if the legislature or the courts were to take steps to curtail or prohibit the pumping of non-appropriable groundwater that threatens riparian areas. In particular, environmental groups and surface water rights holders such as SRP have argued that the pumping of groundwater from the Big Chino sub-basin by Prescott and other communities poses a threat to the nearby Verde River.\footnote{277} If these groups succeed in curtailing or shutting down such pumping, affected landowners may maintain that they are entitled to compensation for the reduction in the value of their property. This argument may carry even greater force after the November 2006 passage of Proposition 207--the Private Property Rights Protection Act--which requires the government to compensate landowners when land-use regulations merely reduce the value of their property.\footnote{278}

How the Supreme Court will resolve this issue may depend on whether the Court continues its recent trend of deferring to the
legislature in matters involving water policy. If the Court were to view groundwater rights as purely a function of statute, the inquiry would be a relatively simple one—unless the legislature takes affirmative steps to establish or acknowledge vested rights based on existing groundwater use, no such rights exist. On the other hand, the court could be persuaded that even in the absence of legislation, its earlier cases already recognize a property right arising out of the prior use of groundwater. Bristor II, in particular, appeared to have existing groundwater users in mind when it rejected the doctrine of prior appropriation, explaining that such users have made “many and large investments ... in the development of ground waters,” which the court felt bound to protect. In grandfathersing historical uses, the legislature also appeared to acknowledge that existing users have property rights that cannot be extinguished without compensation. Nevertheless, Gila River I treated this as an open issue, assuming without deciding that current groundwater users have property interests in groundwater.156

If the Arizona Supreme Court looks to other jurisdictions for guidance, it will see that courts in several states with somewhat similar groundwater systems have held that the initiation of groundwater use transforms a mere expectancy interest into a protected property right. Florida, for example, has upheld private rights in groundwater where landowners have been deprived of existing uses of groundwater. Florida’s approach could prove to be significant because Chino Valley II relied heavily on a Florida decision that concluded, much like Chino Valley II, that “[t]he right of the owner to ground water underlying his land is to the usufruct of the water and not to the water itself.”

B. Other Types of Land-Use Restrictions

The supreme court also explicitly left open the “circumstances in which the owner of the surface estate may, consistent with the GMA, grant others contractual rights to withdraw, use, or transport groundwater from beneath the owner’s land.”

Certainly, a landowner outside an AMA can enter into contractual arrangements to sell water to others, subject to the GMA’s transportation rules. But what about other types of long-term arrangements that purport to bind subsequent owners of the property? Must a city or other large water user acquire land in order to obtain the ability to withdraw and transport groundwater in the future? Or could they employ other types of land-use arrangements that do not involve purchasing land, such as a blanket easement that would permit the drilling of wells when additional water supplies are needed? By the same token, could one who wishes to speculate on groundwater acquire a “groundwater easement” (as opposed to “commercial water rights”), and thereby acquire the right to control the marketing of groundwater from the property in the future? If not, could a landowner accomplish the same thing by retaining a small portion of its property but selling the rest subject to a restrictive covenant that prohibits the buyer from withdrawing groundwater?

The 1991 prohibition on most rural-to-urban groundwater transfers reduces the practical significance of many of these issues by limiting the opportunities for transporting groundwater into urban AMAs. Nonetheless, these issues could arise if the prohibition on interbasin transfers is modified or drought conditions or rural growth create a need for supplemental water supplies in rural areas. The issue could also arise as agricultural land outside AMAs is converted to industrial or residential use subject to an area-wide declaration of covenants and restrictions that purports to reserve rights to withdraw groundwater or to transfer them from individual landowners to a common developer or water district. To the extent such creative land-use measures effectively operate as an attempt to reserve “groundwater rights,” Davis may compel the conclusion that they are unenforceable.

*46 CONCLUSION

Davis is an interesting example of how the common-law process works. Southwest Cotton started that process more than seventy-five years ago, rejecting the doctrine of prior appropriation and introducing the unique concept of “subflow” to distinguish between appropriable and nonappropriable underground water. Two decades later in Bristor I and II, the court, with a shifting cast of justices, at first accepted, and then rejected applying prior appropriation to groundwater and instead adopted the rule of reasonable use. Forced to confront the implications of these and other decisions, Chino Valley II disavowed the property-rights foundation of the common law and made it possible for the legislature to enact reasonable restrictions on groundwater use. Davis is the latest step in the process, but it almost certainly could not have come first in the progression. And it will undoubtedly have implications of its own in future water-rights cases, particularly those that involve attempts, whether directly or indirectly, to reserve, convey or restrict groundwater use.
Footnotes

a1 Partner, Lewis and Roca LLP, Phoenix, Arizona. The author was counsel to one of the parties when the case that is the subject of this article was decided by the Arizona Supreme Court. The views expressed are those of the author alone. This article is adapted from a paper presented at the 17th Annual Arizona Water Law Conference in Phoenix, Arizona on August 13, 2009.


2 203 P.3d 506 (Ariz. 2009).

3 Id. at 507.


5 Davis, 203 P.3d at 510-12.

6 Id. at 510.

7 Under the GMA, landowners outside AMAs may “withdraw and use groundwater for reasonable and beneficial use,” subject to certain restrictions on transporting the water for use elsewhere. ARIZ. REV. STAT. ANN. § 45-453 (2010).

8 Davis, 203 P.3d at 512.

9 Those filing amicus curiae briefs urging the Arizona Supreme Court to hear the case were the Arizona Department of Public Resources, the Salt River Project Agricultural Improvement and Power District (“SRP”), the Town of Prescott Valley, the Town of Chino Valley, Freeport McMoRan Copper and Gold, Inc., and the Roosevelt Water Conservation District.


11 See infra text accompanying notes 99-104.

12 This is not simply a hypothetical. The Paloma Irrigation and Drainage District, comprising much of the former boundaries of the 67,000-acre Paloma Ranch near Gila Bend, Arizona, operates pursuant to such a system of deed restrictions. See Complaint at 1-8, Abengoa Solar, Inc. v. Paloma Irrigation & Drainage Dist., No. CV2009-034841 (Ariz. Super. Ct. dismissed Apr. 16, 2010). Although the deed restrictions governing groundwater use were challenged as constituting the functional equivalent of the unenforceable water-rights reservation at issue in Davis, id. at 9, the case settled without a decision on the merits.

13 The Howell Code, 1864, Ch. 55, § 1.

14 See Maricopa Cnty. Mun. Water Conservation Dist. No. 1 v. Sw. Cotton Co., 4 P.2d 369, 376 (Ariz. 1931), modified and reh’g denied, 7 P.2d 254 (Ariz. 1932) (discussing early Arizona statutes and concluding that, by excluding all but one category of groundwater—i.e., that flowing in “definite underground channels”—the legislature “made a complete determination of just which waters the doctrine of prior appropriation should be applied to”), Southwest Cotton also held that the doctrine of prior appropriation should apply to both surface water and the “subflow” of a surface stream. Id. at 380-81; see also In re Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source (Gila River IV), 9 P.3d 1069, 1083 (Ariz. 2000) (upholding standard adopted by lower court for determining approvable “subflow”). In general, “subflow” denotes “a zone where water pumped from a well so appreciably diminishes the surface flow of a stream that it should be governed by the same law that governs the stream.” Gila
River IV, 9 P.3d at 1073 (quoting In re Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source (Gila River III), 989 P.2d 739, 743 (Ariz. 1999)).

15 See, e.g., Town of Chino Valley v. City of Prescott (Chino Valley II), 638 P.2d 1324, 1326 (Ariz. 1981) (“Waters percolating beneath the soil were not included among those subject to appropriation.”); Bristor v. Cheatham (Bristor II), 255 P.2d 173, 177 (Ariz. 1953) (“[A] prior right to the use of ground waters cannot now be acquired and never could be acquired under the law of prior appropriation[,]”); Sw. Cotton, 4 P.2d at 376 (“[W]e are of the opinion that our holding in Howard v. Perrin, ... that percolating subterranean waters were not subject to appropriation, was and still is the law of Arizona.”); Howard v. Perrin, 76 P. 460, 462 (Ariz. 1904) (“[W]aters percolating generally through the soil beneath the surface are the property of the owner of the soil ....”); see also In re Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source (Gila River II), 857 P.2d 1236, 1242 (Ariz. 1993) (noting that Bristor II “reaffirmed our prior holdings that percolating water is not subject to appropriation”).

16 RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4, intro. note (1979).

17 Id. This is likely because most groundwater common law developed in the East and Midwest, where water supplies are more abundant.


19 RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4, intro. note; WATERS AND WATER RIGHTS, supra note 18.

20 RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4, intro. note; WATERS AND WATER RIGHTS, supra note 18.

21 See RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4 § 858 cmt. b (stating that the general rule “is phrased in terms of nonliability in order to carry forward the policy of encouraging ground water use by permitting more or less unrestricted development of the resource by those who have access to it”).

22 See WATERS AND WATER RIGHTS, supra note 18, § 20.04.

23 Frazier v. Brown, 12 Ohio St. 294, 311 (1861).

24 RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4, intro. note; see WATERS AND WATER RIGHTS, supra note 18, §§ 22.03, 22.04.

25 WATERS AND WATER RIGHTS, supra note 18, § 20.06.

26 RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4, intro. note.

27 Id.

28 Id.

29 WATERS AND WATER RIGHTS, supra note 18, § 22.04(b); see also Bristor II, 255 P.2d 173, 180 (Ariz. 1953).
30  See Bristor II, 255 P.2d at 180.

31  For a discussion of the historical origins of the doctrine of prior appropriation, see WATERS AND WATER RIGHTS, supra note 18, §§ 11.01-11.08.

32  See id. §§ 11.01, 11.02.

33  Id. §§ 11.06(c)(1), 20.06.

34  See supra notes 24-30 and accompanying text.

35  RESTATEMENT (SECOND) OF TORTS § 858 cmt. b (1979); WATERS AND WATER RIGHTS, supra note 18, §§ 20.03, 20.04.

36  WATERS AND WATER RIGHTS, supra note 18, §§ 20.03, 20.04.

37  See City of Del Rio v. Clayton Sam Colt Hamilton Trust, 269 S.W.3d 613, 618 (Tex. App. 2008). See also WATERS AND WATER RIGHTS, supra note 18, § 20.07 (citing Indiana, Maine, and Texas as the three remaining states that continue to adhere to the absolute ownership rule with some limitations).

38  See, e.g., Clayton Sam Colt Hamilton Trust, 269 S.W.3d at 618.


40  See WATERS AND WATER RIGHTS, supra note 18, § 22.06.


42  Id. (quoting RESTATEMENT (SECOND) OF TORTS § 858 cmt. b (1979)).

43  See WATERS AND WATER RIGHTS, supra note 18, § 22.06.

44  See, e.g., Phoenix Title & Trust Co. v. Smith, 416 P.2d 425, 430-31 (Ariz. 1966) (“A grantor has the right to make a reservation of an interest in property.”).

45  Id.


47  RESTATEMENT (SECOND) OF TORTS § 858 cmt. b. [T]he right to withdraw ground water is a property right that may be granted and sold to others. The rule permits the sale of ground water and the grant of the right to extract it to persons who need water but do not want the land overlying it. Placing ground water on the market in this fashion also tends to promote its development and use by those who can make the most valuable use of it.
WATER TRANSFERS, supra note 46, at 200.

Id.

Id.


WATER TRANSFERS, supra note 46, at 200.

Id.


Id. at 19-21, 23-24; Jarvis II, 479 P.2d at 171.


Chino Valley II, 638 P.2d at 1325 n.* (citing ARIZ. REV. STAT. ANN. §§ 45-461 to -462 (1981)).

See ARIZ. REV. STAT. ANN. §§ 45-453, -551 to -559 (2010) (providing that, outside of AMAs, a person may “withdraw and use groundwater for reasonable and beneficial use” subject to certain restrictions on transporting groundwater); see also L. William Staudenmeier, Between a Rock and a Dry Place: The Rural Water Supply Challenge for Arizona, 49 ARIZ. L. REV. 321, 328 (2007).

See ARIZ. REV. STAT. ANN. § 45-544 (Supp. 1981-1982). The GMA also provided that “in any action to recover damages, neither injury to nor impairment of the water supply of any landowner shall be presumed from the fact of transportation.” Id. § 45-545.

The Central Arizona Project is a 336-mile-long diversion canal that transports water from the Colorado River into central and southern Arizona. FAQ, CENTRAL ARIZONA PROJECT, http://www.cap-az.com/about-cap/faq/ (last visited Aug. 29, 2010). It was constructed by the Federal Government at a cost of $3.6 billion. Id. For information about the Central Arizona Project, see About Us, CENTRAL ARIZONA PROJECT, http://www.cap-az.com/about-cap/ (last visited Aug. 29, 2010).
See WATER TRANSFERS, supra note 46, at 196-211 (general discussion of the “water farm” era in Arizona).


See ARIZ. REV. STAT. ANN. § 45-555(E)(1991) (amended 2010) (amended to reduce the amount that can be transported to 8068 acre-feet of water).

See id. § 45-555(A).

See supra note 62 and accompanying text.

See supra notes 31-34 and accompanying text.

WATERS AND WATER RIGHTS, supra note 18, § 20.06.

76 P. 460 (Ariz. 1904).

Id. at 462.


Bristor II, 255 P.2d at 182.

Id. at 179.

Id. at 175.


Id. at 561-62.

Id. at 561.

Id.

Exhibit of Record at 279, Neal, 541 P.2d 599. Although not extensively discussed in the court’s opinion, the water-rights agreement was included in the record on appeal. A copy of the agreement is on file with the author. Id.

Id. at 280-81.

Id. at 281-82.
Neal, 541 P.2d at 561.

Id. at 562-63.

Id. at 562.

Id. at 563.

Id. at 563.

Id. at 563.


Id.


Id. at 767.

Id. at 770.

Id. 770-71.

Id. at 768 (emphasis added).

In rejecting a similar constitutional challenge to groundwater restrictions nearly four decades later, the Arizona Court of Appeals employed a similar reading of Ernst. See Aikins v. Ariz. Dep’t of Water Res., 743 P.2d 946, 950-51 (Ariz. Ct. App. 1987) (citing Ernst and noting that “previous Arizona decisions ... have declared that the right to use groundwater is subject to regulation by the state acting under its police power” and, accordingly, “appellants have no vested right to use the groundwater beneath their land for irrigation”).


Id. at 1020-32.

Id. at 1022-23.

Id. at 1014-19.

Id. at 1015.

Id. at 1018.
In this sense, the right of a landowner would be like a revocable license to withdraw minerals, which confers no interest in the resource itself until mined from the land and reduced to actual possession. See, e.g., Saxman v. Christmann, 79 P.2d 520, 522 (Ariz. 1938) (“[A] contract simply giving a right to take ore from a mine ... confers a mere license, and the licensee acquires no right to the ore until he separates it from the freehold.” (quoting 17 RULING CASE LAW § 83 (William M. McKinney & Burdett A. Rich eds., 1915)).
Id. at 450-51.

See id.

Id. at 451.

Id.

Id.

Id.

Gila River IV, 9 P.3d 1069, 1079, 1083 (Ariz. 2000).

Id.

Id. at 1083.


Id. at 507.

See supra notes 105-09 and accompanying text.

Davis, 203 P.3d at 507.

Id. at 507-08.

Id. at 508.


Davis, 203 P.3d at 512.

Id. at 510 (citations omitted).

Id.

Id. at 509-10 (quoting Gila River I, 830 P.2d 442, 451 (Ariz. 1992)).


See supra notes 98-104 and accompanying text.

Davis, 203 P.3d at 511-12.


Davis, 203 P.3d at 511-12.

Id. at 512.

See generally id.

See ARIZ. REV. STAT. ANN. §§ 45-461 to -462.

Id. § 45-465.


Now codified at ARIZ. REV. STAT. ANN. § 12-1134, Proposition 207 was approved overwhelmingly by Arizona voters in the November 2006 election and provides for some of the strongest property-rights protections in the nation. See WATERS AND WATER RIGHTS, supra note 18, § 20.09 (discussing the takings implications of a similar statewide initiative in Oregon that requires property owners to be compensated if government regulation of water usage reduces the value of their land).


ARIZ. REV. STAT. ANN. § 45-551 to -559 (2010).

In a recent case, the Colorado Supreme Court addressed such an attempt by a developer to reserve and transfer groundwater rights

