DON'T BE LEFT OUT TO DRY: Recognizing and Addressing Water Supply Issues in Arizona Real Estate Transactions

Mark A. McGinnis, Esq.^{*} & R. Jeffrey Heilman, Esq.^{**}

INTRODUCTION

Water is and always has been an issue of critical importance in Arizona. Living in Arizona's desert climate means that all economic activity, from agricultural and industrial enterprises to residential development, is entirely dependent on the state's limited water supplies. Even today, Arizonans engaged in buying or selling real estate confront significant water issues, both legal and technical. This paper examines several of the issues that commonly arise in the context of real estate transactions. Although these issues most often arise with respect to transactions involving commercial or industrial property, some of the most perplexing problems can arise in the normal course of residential sales.

The potential ramifications of unrecognized water issues are easy to appreciate. For example, a "prime commercial property" with a water supply of adequate quantity and quality is far more valuable than one that lacks such a supply. In most cases, failure to adequately address water supply issues will result in buyers spending substantially more capital to remedy the situation. In other situations, it might be impossible, regardless of the cost, to make such arrangements after the fact.¹ Unlike in other areas, the three most important attributes of a parcel of land in Arizona are "location, location, and water"—and not necessarily in that order.

^{*.} Member, Salmon, Lewis & Weldon, P.L.C., Phoenix, Arizona. B.S., M.S., University of Arizona; J.D., Arizona State University.

^{**.} Associate, Salmon, Lewis & Weldon, P.L.C., Phoenix, Arizona. B.A., Santa Clara University; J.D., University of Arizona.

^{1.} See Lincoln L. Davies, Just a Big, "Hot Fuss"? Assessing the Value of Connecting Suburban Sprawl, Land Use, and Water Rights Through Assured Supply Laws, 34 ECOLOGY L. Q. 1217, 1231–32 (2007) (explaining that one of the main purposes of assured water supply laws is preventing consumers from purchasing property without adequate water rights, and placing the expense of acquiring new water on developers); see also L. William Staudenmaier, Between a Rock and a Dry Place: The Rural Water Supply Challenge for Arizona, 49 ARIZ. L. REV. 321, 329 n.47 (2007) (stating that the Arizona Legislature enacted water adequacy legislation "in response to marketing of residential lots without available water supplies").

I. SERVICE FROM ESTABLISHED WATER PROVIDERS

Procuring service from a suitable water delivery entity is often the easiest way to obtain water for most purposes. Therefore, most real estate transactions within the service areas of established water providers involve dealing with the provider to ensure that service is properly transferred to the new owner. Common water delivery entities include cities, towns, and private water companies. Such entities have "service area rights" under the Groundwater Code that allow them to withdraw groundwater from within their service areas to meet the needs of their customers.² They also may possess or administer surface water rights.³ The process for transferring service from one customer to another is usually relatively simple, but will vary depending upon the provider.

Sometimes, rather than transferring an existing service, property purchasers must obtain new service from a provider. The method for applying for and obtaining water service from a city, town, or private water company varies greatly between service entities. Some providers require a formal application, while others employ a much simpler process. Application requirements can range from a detailed written proposal including engineering reports to little more than a phone call or visit to the provider's office. Because the processes for obtaining water service from a water delivery entity can differ significantly, the best way to find out how to obtain water service is to contact that entity directly.

Many water delivery entities base their supplies upon a combination of groundwater and surface water. Some providers have contracted to accept Central Arizona Project ("CAP") water delivered from the Colorado River. A typical customer may not even know the source of the water it receives.

Although transferring or procuring commercial water service is the most economical and feasible option in many instances, it is not always the least expensive or preferred option. This is, in part, because most of these service entities provide water that meets drinking water quality standards. For example, in many areas, the price of obtaining drinking water to use for an industrial process can be cost-prohibitive. Entities that do not need highquality water might be able to obtain supplies from alternative sources at a lower price.

^{2.} ARIZ. REV. STAT. ANN. §§ 45-491 to -498 (2013). "Service area rights" apply within Active Management Areas ("AMAs") under the Groundwater Code. *Id.* § 45-491(A). These service areas are different from the areas of "Certificates of Convenience and Necessity" ("CC&N") issued by the Arizona Corporation Commission, and they are not necessarily coterminous with the "city limits" of a city or town. *See* ARIZ. ADMIN. CODE § R14-2-402 (2012) (giving an overview of CC&Ns).

^{3.} ARIZ. REV. STAT. ANN. § 45-151(A) (2013).

Another problem is that many facilities in remote areas are often not located within the established service area of any city, town, or private water company. In order to obtain service for these outlying facilities, the customer often must incur the capital cost of constructing infrastructure (e.g., pumping plants or lines) to deliver the water to the new area. This capital cost is often substantial and gives the water user an incentive to look elsewhere for its supply.

II. A BRIEF INTRODUCTION TO ARIZONA WATER LAW

Those who purchase property that does not receive service from an established provider may find it necessary to delve into the morass of Arizona water law. Arizona law divides water into two main categories—groundwater and surface water. This paper examines the issues that arise with respect to both categories. In examining water law issues, the threshold question is whether a particular water source constitutes surface water, which is subject to "appropriation" under the State Surface Water Code,⁴ or groundwater, which is governed by a completely different set of statutory requirements set forth in the Groundwater Code.⁵

Since the enactment of Arizona's first territorial water code in 1864, Arizona surface water use has been subject to the prior appropriation doctrine.⁶ Water subject to appropriation in Arizona is defined by statute to include: "waters of all sources, flowing in streams, canyons, ravines or other natural channels, or in definite underground channels, whether perennial or intermittent, flood, waste or surplus water, and of lakes, ponds and springs on the surface"⁷

Groundwater, other than that flowing in a definite underground channel, is not mentioned as a category of "appropriable water." In *Bristor v. Cheatham*, a divided Arizona Supreme Court held that groundwater was subject to the doctrine of prior appropriation.⁸ A few months later, however, upon rehearing

^{4.} ARIZ. REV. STAT. ANN. §§ 45-141 to -190 (2013).

^{5.} *Id.* §§ 45-401 to -704.

^{6.} See W. Maricopa Combine, Inc. v. Arizona Dep't of Water Res., 26 P.3d 1171, 1178 (Ariz. Ct. App. 2001) ("Arizona has always followed the prior appropriation doctrine in an attempt to deal with the scarcity of water."); see also ARIZ. CONST. art. XVII, § 1 ("The common law doctrine of riparian water rights shall not obtain or be of any force or effect in the state.").

^{7.} ARIZ. REV. STAT. ANN. § 45-141(A) (2013).

^{8. 240} P.2d 185, 193 (Ariz. 1952), *superseded by statute*, Groundwater Management Act of 1980, 1980 Ariz. Sess. Laws 1339 (codified as amended at ARIZ. REV. STAT. ANN. §§ 45-401 to -704 (2013)), *as recognized in* Town of Chino Valley v. City of Prescott, 638 P.2d 1324, 1327 (1981).

in *Bristor v. Cheatham ("Bristor II")*, the Arizona Supreme Court, again by a divided Court, rejected the doctrine of prior appropriation for groundwater.⁹

In 1932, the Arizona Supreme Court in *Southwest Cotton* interpreted the Surface Water Code's definition of appropriable water as encompassing the "underflow, subflow or undercurrent . . . of a surface stream^{"10} The Court went on to define "subflow" as "those waters which slowly find their way through the sand and gravel constituting the bed of the stream, or the lands under or immediately adjacent to the stream, and are themselves a part of the surface stream."^{"11}

Although the Supreme Court's definition of "subflow" in *Southwest Cotton* sparked much debate over the years, this debate did not materialize into an attempt to further define "subflow" until 1987. In the context of the *Gila River General Stream Adjudication*, the trial court, Judge Stanley Goodfarb presiding, held hearings on the relationship between surface water and groundwater for five days in October 1987. The test adopted by Judge Goodfarb as a result of these hearings was later struck down by the Arizona Supreme Court.¹² The issue was then returned to Judge Goodfarb, who issued a second opinion in June 1994, adopting yet a different test by which to distinguish between appropriable surface water and non-appropriable groundwater.¹³

On remand, Judge Goodfarb decided on a new test that defined "subflow" as the "saturated floodplain Holocene alluvium," a geological unit.¹⁴ Under this new test, wells located within this subflow zone are presumed to be pumping subflow, while wells located outside are presumed not to be pumping subflow.¹⁵ Moreover, wells located outside of the subflow zone may be found to be pumping subflow if their "cone of depression" (the subsurface water level that dips as a result of the pumping of groundwater) reaches the subflow zone and pumping affects the volume of surface and subflow in an amount capable of being measured.¹⁶ The Arizona Supreme Court again granted an interlocutory appeal to review Judge Goodfarb's "subflow" ruling in 2000, and this time affirmed Judge Goodfarb's test in its entirety, finding that the "entire saturated

^{9. 255} P.2d 173, 177 (Ariz. 1953).

^{10.} Maricopa Cnty. Mun. Water Conservation Dist. No. 1 v. Sw. Cotton Co., 4 P.2d 369, 380 (Ariz. 1931), *modified and reh'g denied*, 7 P.2d 254 (Ariz. 1932).

^{11.} *Id*.

^{12.} *In re* Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source ("Gila II"), 857 P.2d 1236, 1248 (Ariz. 1993).

^{13.} *Id.*

^{14.} In re Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source ("Gila IV"), 9 P.3d 1069, 1073 (Ariz. 2000).

^{15.} Id. at 1081.

^{16.} Id. at 1081-82.

floodplain Holocene alluvium . . . will define the subflow zone in any given area." $^{\prime\prime\prime}$

Although the controversy regarding the "surface water/groundwater" distinction is more widespread and complicated than one might initially think, in many instances, parties can often determine whether they are dealing with appropriable water or groundwater based upon the distance from their well to the surface stream with some degree of certainty. In some cases, however, it would be prudent to hire a hydrologist to assist in making such a determination.

III. GROUNDWATER ISSUES

Most individuals and entities in Arizona that do not obtain water from an established water provider rely upon their own wells for pumping groundwater. This alternative can be less expensive than obtaining water service and also may be more readily available in remote areas. Groundwater use depends, however, upon the physical availability of groundwater at the site and the legal restrictions imposed by the State.

The Groundwater Code governs the withdrawal and use of groundwater in Arizona.¹⁸ The current Code, set forth in title 45 of the Arizona Revised Statutes, is the result of the Groundwater Management Act of 1980 ("GMA").¹⁹ Although the basic framework of the Code has not been modified since 1980, it has been amended every year since then.²⁰

The Code applies, at least in part, to every person in the state who withdraws and uses groundwater, except Indian tribes. The overall goal of the GMA is to eliminate groundwater overdraft, i.e., withdrawals in excess of recharge, by implementing a series of groundwater management plans through the year 2025.²¹ To this end, the GMA established four AMAs within the state (Tucson, Phoenix, Prescott and Pinal).²² A fifth AMA, Santa Cruz, was established by the Arizona State Legislature in 1994.²³

The five current AMAs are roughly coterminous with the county boundaries, but are delineated according to groundwater basins rather than

^{17.} *Id.* at 1081.

^{18.} ARIZ. REV. STAT. ANN. §§ 45-401 to -704 (2013).

^{19.} See supra note 5 and accompanying text; Ariz. Laws 1980, 4th Spec. Sess., ch. 1.

^{20.} See, e.g., 2001 Ariz. Sess. Laws 38; 2000 Ariz. Sess. Laws 193; 1999 Ariz. Sess. Laws 200. "Safe-yield" is the management goal for the Phoenix, Tucson, and Prescott AMAs. *Id.* The Pinal and Santa Cruz AMAs have different management goals. *Id.* § 45-562(B) & (C).

^{21.} ARIZ. REV. STAT. ANN. § 45-562(A) (2013).

^{22.} See id. § 45-411.

^{23.} See id. § 45-411.03.

political lines. ²⁴ AMAs are geographic areas in which the Arizona Department of Water Resources ("ADWR") has deemed groundwater overdraft most severe. Accordingly, the Groundwater Code imposes stringent restrictions and conservation requirements upon most groundwater uses within AMAs.²⁵ Although some provisions of the Groundwater Code apply only within the AMAs, other provisions apply statewide.²⁶

A. Well Drilling and Registration Requirements

Before an entity can withdraw groundwater, it must drill a well. Prior to drilling a new well, or deepening or replacing an existing well, a person must file a notice of intent to drill or apply for a well drilling permit from ADWR.²⁷ Whether a notice of intent or a drilling permit is required depends upon the type and location of the well.²⁸

^{24.} Maps of the various AMAS and INAs are available at the ADWR website at *Active Management Areas & INAs*, AZWATER.GOV, http://www.azwater.gov/azdwr/watermanagement/AMAs/default.htm (last visited April 28, 2014).

^{25.} See Ariz. Rev. Stat. Ann. §§ 45-411 to -421 (2013).

^{26.} See id. §§ 44-411 to -704.

^{27.} Id. § 45-596.

^{28.} Id.

Arizona		
Type of Well	Within AMAs	Well Location In Other Areas
Exempt or Replacement	Notice of Intent	Notice of Intent
Non-Exempt	Well Drilling Permit Application	Notice of Intent
Recharge and Recovery	Well Drilling Permit Application	Well Drilling Permit

Table 1: What You Need to File Before Drilling a Well in

Table 1 shows the requirements that must be met before drilling a well in Arizona, as set forth in Arizona Revised Statutes sections 45-591 to -604.²⁹ Well drilling permits are required prior to drilling non-exempt wells³⁰ within AMAs and for all recharge and recovery wells.³¹ All other wells require only that the person file a notice of intention to drill with ADWR before drilling.³²

In addition, all wells must be registered with ADWR.³³ Any prospective purchaser of property upon which a well is located should check with ADWR to ensure that the well is properly registered.³⁴ Although the statutory deadline for registering wells has long since passed, one still can register existing wells, subject to a late registration fee. If the well has already been

Application

^{29.} Id. at §§ 45-491 to -604.

^{30.} Exempt wells are those with a pumping capacity of thirty-five gallons per minute or less. See id. § 45-454.

^{31.} Id. § 45-598.

^{32.} Id. § 45-596.

^{33.} See id. §§ 45-593, -596.

^{34.} ADWR's well registry database is available online at Well Registry Web, AZWATER.GOV, https://gisweb.azwater.gov/waterresourcedata/WellRegistry.aspx (last visited Apr. 5, 2014).

registered, the buyer or seller need only submit a one-page form to ADWR notifying it of the conveyance of well ownership.³⁵

В. Obtaining or Conveying a Legal Right to Withdraw and Use Groundwater

Permits to drill and operate a well do not provide the permit holder with the right to withdraw and use groundwater.³⁶ In addition to drilling and operating a well, groundwater users also must possess a separate legal right to withdraw and use water.³⁷ The requirements for obtaining or conveying such a right vary greatly depending upon where the property is located.³⁸ ADWR plays a key role in regulating the withdrawal and use of groundwater in the state. The permits and approvals required for obtaining or conveying the rights for a groundwater supply must come from ADWR.³⁹

1. Groundwater use inside AMAs

ADWR's regulatory role is most prevalent within AMAs. The Groundwater Code requires ADWR to develop a series of five management plans for each AMA to cover the time period between 1980 and 2025.⁴⁰ The first management plan covered the time between 1980 and 1990,⁴¹ the Second Management Plan ran until the year 2000,⁴² the Third Management Plan ran until the year 2010,⁴³ and the Fourth Management Plan runs until 2020.⁴⁴ Each management plan contains increasingly restrictive conservation requirements for all types of groundwater users.⁴⁵

^{35.} ARIZ. ADMIN. CODE § R12-15-151(B)(4)(d) (2007) (fee schedule); see also Ariz. Dep't of Water Res., Form 55-65 Instructions - Late Registration of a Well (June 2011), available at http://www.azwater.gov/azdwr/WaterManagement/NOI/documents/documents/55-65InstrLateRegrev6_11.pdf.

^{36.} See Ariz. Rev. Stat. Ann. §§ 45-451, -453 (2013).

^{37.} Id.

^{38.} Compare ARIZ. REV. STAT. ANN. § 45-451 (groundwater use inside AMAs) with ARIZ. REV. STAT. ANN. § 45-437 (groundwater use inside Irrigation Non-expansion Areas) and ARIZ. REV. STAT. ANN. § 45-453 (groundwater use outside AMAs and Irrigation Non-expansion Areas).

^{39.} See, e.g., ARIZ. REV. STAT. ANN. §§ 45-476.01(A), -478, -480, -521 (2013).

^{40.} Id. § 45-563.

^{41.} Id. § 45-564.

^{42.} Id. § 45-565.

^{43.} Id. § 45-566.

^{44.} Id. § 45-567.

^{45.} See id. §§ 45-563 to -568.

DON'T BE LEFT OUT TO DRY

Within AMAs, the GMA abolished the common-law reasonable use doctrine and replaced it with an administrative system of groundwater rights.⁴⁶ A person may not withdraw or use groundwater in an AMA without obtaining one of these rights.⁴⁷ Any prospective purchaser intending to withdraw or use groundwater should take all necessary steps to ensure that such withdrawal and use is done pursuant to such a right and in conformance with the applicable law.

a. Grandfathered Rights

A person who was withdrawing or using groundwater in an AMA prior to 1980 may continue to do so pursuant to a certificate of grandfathered right.⁴⁸ There are three types of grandfathered rights: (1) irrigation grandfathered rights ("IGFRs");⁴⁹ (2) Type 1 non-irrigation grandfathered rights;⁵⁰ and (3) Type 2 non-irrigation grandfathered rights.⁵¹ Each of these rights has a different basis, and different limitations apply to each type of right.⁵²

An IGFR is the right to withdraw or receive and to use groundwater to irrigate land that was irrigated with groundwater at any time between 1975 and 1980.⁵³ The Code defines "irrigation" as applying water to two or more acres of land for commercial agriculture.⁵⁴ For example, landscape or golf course watering is an "industrial" use under the Code—not an "irrigation" use.⁵⁵ An IGFR holder possesses a certificate issued by ADWR, which specifies the number of acres of farmland that may be irrigated pursuant to that right; the amount of water that can be used to irrigate those acres is calculated based upon a statutory formula that is designed to decline over time.⁵⁶ IGFRs are appurtenant to the farmland that was irrigated prior to 1980.⁵⁷ An IGFR can be transferred to the new owner of the land who intends to continue the irrigation use, and that process is relatively simple. ADWR has forms that need to be completed to notify it of the transfer.⁵⁸

- 46. Id. § 45-451.
- 47. *Id*.
- 48. Id. § 45-462.
- 49. Id. § 45-465.
- 50. *Id.* § 45-463.
- 51. *Id.* § 45-464.
- 52. Id. §§ 45-462 to -476.
- 53. Id. § 45-465.
- 54. *Id.* § 45-402(18).
- 55. Id.
- 56. Id. § 45-465.
- 57. *Id*.
- 58. Id. § 45-472.

Although IGFRs must be used for irrigated agriculture and cannot be used for industrial or commercial purposes, many persons involved in commercial real estate transactions encounter these rights because the property that they purchase has been irrigated and farmed in the past. Under certain circumstances, a new owner can convert an IGFR to a Type 1 right so that he can withdraw and use the water for a non-irrigation use.⁵⁹

A Type 1 non-irrigation grandfathered right is a right to withdraw or receive and use groundwater for a non-irrigation use.⁶⁰ Type 1 rights are created only by the conversion of an IGFR to a non-irrigation use.⁶¹ The certificate of Type 1 right specifies the land to which the right is appurtenant and designates the annual quantity of groundwater that may be withdrawn pursuant to the right.⁶² Although the quantity may vary somewhat, it never exceeds three acre-feet per acre of retired irrigated land.⁶³

Type 1 rights are often utilized to provide water for commercial and industrial facilities, especially when the facility is constructed on a parcel that previously was irrigated farmland.⁶⁴ In order to convert an IGFR to a Type 1 right, the irrigated land must be retired and the conversion must be approved by ADWR.⁶⁵ As a general matter, the water withdrawn pursuant to a Type 1 right must be used on the land that was formerly irrigated farmland.⁶⁶ Detailed limitations apply to any use of water pursuant to a Type 1 right off the land that was previously irrigated.⁶⁷ ADWR also provides forms for notifying it of the conveyance of a Type 1 right from one owner to another.⁶⁸

A Type 2 right is also a right to withdraw and use groundwater for nonirrigation purposes.⁶⁹ Unlike a Type 1 right, however, a Type 2 right is not appurtenant to any land.⁷⁰ Type 2 rights are based upon non-irrigation uses of

69. Ariz. Rev. Stat. Ann. § 45-464 (2013).

70. Id. § 45-471(A) ("The owner of a type 2 non-irrigation grandfathered right . . . may use groundwater withdrawn pursuant to the right for any non-irrigation purpose at any location").

^{59.} Id. § 45-469.

^{60.} *Id.* § 45-463.

^{61.} *Id*.

^{62.} *Id.* § 45-463(A).

^{63.} *Id.*

^{64.} *Id.* § 45-463(A), -472.

^{65.} *Id.* § 45-472(C).

^{66.} *Id.* § 45-472.

^{67.} *Id.* §§ 45-469 to -473.

^{68.} All forms are available on the ADWR website at http://www.azwater.gov/azdwr/WaterManagement/GroundWater/PermitsFormsApplicationsWa terRights.htm.

46:0577] DON'T BE LEFT OUT TO DRY

groundwater that existed prior to 1980.⁷¹ The Type 2 certificate specifies an annual quantity of groundwater that may be withdrawn pursuant to the right.⁷² Although no "new" Type 2 rights may be issued, existing Type 2 rights may be freely transferred within AMAs.⁷³ As with the other types of grandfathered rights, ADWR has forms for notifying it of a conveyance of a Type 2 right.⁷⁴ In addition to conveying ownership, a Type 2 right also can be moved from one well to another, i.e., an owner can move the "paper" right without physically transporting the water.⁷⁵ A Type 2 rights offer much more flexibility as to location of use than do Type 1 rights.⁷⁷ This added flexibility often makes them more valuable in the context of real estate transactions.⁷⁸

b. Groundwater Withdrawal Permits

The drafters of the GMA recognized that the system of grandfathered rights alone would not provide the flexibility necessary to supply potential desired water uses in all situations. To supplement the grandfathered rights system, the GMA also authorized ADWR to issue groundwater withdrawal permits.⁷⁹ ADWR has issued, and continues to issue, a number of these permits to water users who do not fit into the grandfathered rights system.

Groundwater withdrawal permits are particularly important in real estate transactions, especially for new developments. If the purchaser cannot obtain service from a water delivery entity and does not have access to sufficient grandfathered rights, applying for a groundwater withdrawal permit might be an acceptable means to obtain a water supply.

Prospective purchasers of property upon which water is used pursuant to an existing groundwater withdrawal permit should be especially mindful of issues relating to the conveyance of that permit. Although ADWR has occasionally allowed such permits to be transferred, such transfers are the exception rather than the rule. ADWR usually will allow the permit to be transferred if the new owner plans to engage in precisely the same type of water use as the prior owner (e.g., the new owner intends to continue

^{71.} Id. § 45-464(A), (F).

^{72.} Id.

^{73.} Id. § 45-471, 474.

^{74.} *See supra* note 66.

^{75.} Ariz. Rev. Stat. Ann. § 45-471, -474 (2013).

^{76.} Id. § 45-464.

^{77.} Id.

^{78.} See id.

^{79.} *Id.* §§ 45-511 to -528.

operating the mobile home park for which the permit was originally issued).⁸⁰ If, however, the new owner intends to develop a different use of the water (e.g., building a shopping mall instead of operating a mobile home park), ADWR reviews the conveyance with more scrutiny and will require information that is, as a practical matter, equivalent to applying for an entirely new permit.⁸¹ Thus, prospective purchasers should contact ADWR to discuss the transferability of the permit prior to making any financial commitments based upon the assumption that the permit can be transferred without complications.⁸²

The Groundwater Code provides for several types of withdrawal permits.⁸³ The types most applicable to private entities are: (1) dewatering permits; (2) mineral extraction and metallurgical processing permits; (3) general industrial use permits; (4) poor quality groundwater permits; (5) temporary permits for electrical energy generation or dewatering; (6) drainage water permits; and (7) hydrologic testing permits.⁸⁴ Each type of permit addresses a different use and imposes different requirements.⁸⁵

The most common type of withdrawal permit is the general industrial use permit ("GIU").⁸⁶ A GIU may be issued for any non-irrigation use, so long as both the point of withdrawal and place of use are located outside the exterior boundaries of the service area of a city, town, or private water company.⁸⁷ The Director of ADWR has the authority to issue GIUs for periods of up to fifty years.⁸⁸ The applicant must comply with several conditions to obtain a permit.⁸⁹ Because the GIU program is designed to allow the withdrawal of groundwater when other sources of water are unavailable, the applicant must demonstrate that other water sources are unavailable or uneconomical.⁹⁰

^{80.} Id. § 45-520(A).

^{81.} See Ariz. Dep't of Water Res., ADWR Application Guidelines, Conveyance of Withdrawal Permit (June 2011), available at http://www.azwater.gov/azdwr/WaterManagement/GroundWater/documents/520BPermitConve yInstrev6_11.pdf.

^{82.} *Id.*

^{83.} Id. § 45-512.

^{84.} *Id.*

^{85.} *Id.*

^{86.} *Id.* § 45-515.

^{87.} *Id.* § 45-515(A).88. *Id.* § 45-515(B).

^{11.945-515}

^{89.} *Id.* § 45-515.

^{90.} Id. § 45-515(A)(1)–(4).

c. Exempt withdrawals

In addition to grandfathered rights and groundwater withdrawal permits, many individuals and some entities withdraw and use groundwater by what are known as "exempt withdrawals." Exempt withdrawals are not a type of groundwater right, but rather are a class of groundwater withdrawals that are exempt from most of the restrictions of the Groundwater Code due to the limited quantity of water withdrawals for non-irrigation uses from wells with a pump capacity of thirty-five gallons per minute or less.⁹² If a transaction involves a residential water use that falls below this quantity, the prospective purchaser can be relatively confident that the existing water use can continue.⁹³

2. Groundwater use inside INAs

The Groundwater Code creates a second type of geographic area other than AMAs, called Irrigation Non-expansion Areas ("INAs").⁹⁴ INAs are not often involved in real estate transactions, mostly because they are located primarily in more remote, rural areas and because the restrictions on groundwater use in INAs is less stringent than in AMAs.⁹⁵

In an INA, no new acreage that was not irrigated between 1975 and 1980 can be irrigated.⁹⁶ No other restrictions on water use within INAs exist in the Groundwater Code.⁹⁷

3. Groundwater use outside AMAs and INAs

Groundwater use in areas of the state outside AMAs and INAs is governed by the doctrine of reasonable and beneficial use.⁹⁸ The law of allocation of groundwater outside AMAs and INAs is still relatively undefined. The state of the law continues to rest primarily with a series of pre-1980 judicial decisions, although some questions exist as to the applicability of these cases in view of the 1980 Code. The Arizona Supreme Court has held, however,

^{91.} Id. § 45-454.

^{92.} Id.

^{93.} Id.

^{94.} Id. §§ 45-431 to -440.

^{95.} See generally id.

^{96.} Id. § 45-439(A).

^{97.} Id. §§ 45-431 to -440.

^{98.} Id. § 45-453.

that although Arizona law allows landowners outside AMAs and INAs to withdraw groundwater, it does not provide them a prospective interest in continued groundwater use or a "property right" that may be severed and transferred.⁹⁹

In general, entities purchasing property and developing new facilities outside AMAs and INAs are effectively limited only by the physical supply of groundwater and the potential adverse impacts on other pumpers.¹⁰⁰ If the property is isolated to the extent that any adverse effects of its pumping on nearby users would be minimal, the landowner can withdraw and use groundwater without substantial regulation by the State.¹⁰¹ Although the well drilling and registration requirements outlined above apply, virtually no regulatory controls are imposed on the withdrawal and use of groundwater in such areas.¹⁰²

C. Adequate and Assured Water Supply Requirements

The adequate and assured water supply provisions of the GMA initially were an attempt by the drafters to address the historical problems with land fraud. The *adequate* water supply requirements apply outside AMAs. The *assured* water supply requirements that apply within AMAs are much more stringent. Before a person may offer subdivided or unsubdivided land in an AMA for sale or lease, the person must show that the land has an assured water supply.¹⁰³ That is, it must have a continuously and legally available water supply of sufficient quantity and quality to meet the needs of the development for 100 years. Moreover, the developer must demonstrate the financial capability to construct any required delivery or treatment systems, and the proposed water use must be consistent with the management plan and goals for the AMA in which the development is located.¹⁰⁴

The assured water supply requirements have become a crucial water management tool for ADWR. By controlling the types and amounts of water that a developer can count toward proving an assured water supply, ADWR can influence the subsequent effect on different existing or future water supplies. Under ADWR's assured water supply rules, ¹⁰⁵ a certificate of

^{99.} Davis v. Agua Sierra Res., L.L.C., 203 P.3d 506, 510–12 (Ariz. 2009).

^{100.} See generally ARIZ. REV. STAT. ANN. § 45-576 (2013).

^{101.} *Id.*

^{102.} Id.

^{103.} Id. § 45-463.

^{104.} *Id*.

^{105.} ARIZ. ADMIN. CODE §§ R12-15-701 to -729 (2012).

assured water supply cannot be obtained based upon the projected use of "mined" groundwater (groundwater to be withdrawn in quantities exceeding the rate of recharge). This requirement forces developers to look to other, "renewable" supplies—e.g., surface water, Central Arizona Project ("CAP") water, and effluent reuse.

Anyone involved in residential development within AMAs should be intimately familiar with the assured water supply requirements.¹⁰⁶ These statutes and regulations are some of the most important legal provisions affecting new development in Arizona's urban areas today.

IV. SURFACE WATER ISSUES

If the property in question is near a lake or stream, the transaction may involve issues relating to Arizona's Surface Water Code.¹⁰⁷ Although surface water rights are limited in some areas by the lack of available surface water, they are important in many areas of the state.

The primary advantage of using surface water instead of groundwater is often cost. Withdrawing groundwater often requires pumping from great depths, which involves substantial capital and energy expenses. Conversely, surface water can usually be diverted for use with less expense.

A. The Prior Appropriation Doctrine

Surface water rights in Arizona are governed by the statutorily adopted doctrine of prior appropriation, which is based upon the principle of "first in time, first in right."¹⁰⁸ Under this doctrine, a person who first appropriates the waters of a lake or stream has the better right to use those waters as against all subsequent appropriators.¹⁰⁹

Water may be appropriated in Arizona for irrigation, domestic, municipal, water power, stock watering, artificial groundwater recharge, mining,

^{106.} In 2007, the Arizona Legislature amended the adequacy program whereby counties gained the authority to require subdivision developers to demonstrate an adequate water supply for a proposed subdivision to ADWR before the developers could receive approval. ARIZ. REV. STAT. ANN. § 45-108(A) (2013). Accordingly, developers outside of AMAs should acquaint themselves with this program.

^{107.} ARIZ. REV. STAT. ANN. §§ 45-101 to -343 (2013) (also sometimes referred to as the "Public Water Code").

^{108.} Id. §§ 45-101, -151(A).

^{109.} See, e.g., Adams v. Salt River Valley Water Users Ass'n, 89 P.2d 1060, 1066 (Ariz. 1939).

recreations and wildlife uses.¹¹⁰ Water may be appropriated for personal use by the appropriator or for delivery to other users.¹¹¹

B. Obtaining an Appropriative Right

Although appropriative rights have been acquired by several different processes over the course of the history of Arizona, only one mechanism remains through which new users can obtain legal rights to surface water without purchasing or otherwise acquiring someone else's existing water rights. If an individual or entity wants to appropriate water for a new use, it must file an application to appropriate with ADWR.¹¹² In evaluating the application to appropriate, ADWR must consider whether the "proposed use conflicts with vested rights, is a menace to public safety, or is against the interests and welfare of the public"¹¹³ If any of these three conditions is present, ADWR must reject the application.¹¹⁴

If ADWR approves the application to appropriate, it will issue a permit to the applicant.¹¹⁵ The applicant may then proceed to perfect the application by constructing any necessary diversion or storage works and applying the water to a beneficial use as described in the permit.¹¹⁶ Except for applications by cities and towns for municipal use, all applicants must begin construction of the necessary works within two years after the date of approval of the application.¹¹⁷ Construction must be "prosecuted with reasonable diligence and completed within a reasonable time which shall be fixed in the permit but not to exceed five years from the date of approval."¹¹⁸ ADWR may grant extensions from the five-year deadline for good cause shown.¹¹⁹

Once the appropriative right has been perfected, ADWR will issue a certificate of water right to the applicant.¹²⁰ The certificate sets forth the name and address of the appropriator, along with the date of priority, extent and purpose of the appropriation.¹²¹ ADWR decisions regarding the issuance of a

111. Id.

- 117. Id. § 45-100. 118. Id.
- 110. *Id.* 119. *Id.*

121. Id.

^{110.} ARIZ. REV. STAT. ANN. § 45-151(A) (2013).

^{112.} Id. § 45-152(A).

^{113.} *Id.* § 45-153(A).

^{114.} *Id*.

^{115.} *Id.* § 45-153(C).

^{116.} *Id.* § 45-158. 117. *Id.* § 45-160.

^{120.} *Id.* § 45-162(A).

permit or certificate are subject to administrative review under Arizona's Administrative Procedure Act¹²² and subsequent judicial review under Arizona's Administrative Review Act.¹²³

C. Conveying an Existing Appropriative Right

The conveyance of an existing appropriative right can be complex and involves several different issues. If the new owner intends to use the right for the same purpose as the prior owner, the conveyance can be accomplished by deed and by notifying ADWR of the transfer.¹²⁴ Any transaction that involves changing the point of diversion, place of use, or purpose of use, however, will require an application and approval process with much greater scrutiny that can jeopardize the water right if it was not properly preserved by previous landowners.¹²⁵

Arizona Revised Statutes section 45-156(B), first enacted in 1927, governs changes in the purpose of water use or point of diversion where such changes do not also involve a severance of the water right from the land to which it is appurtenant and the transfer of the right to other land.¹²⁶ Changes in point of diversion are generally allowed if no other appropriator is injured by the change.

Arizona Revised Statutes section 45-172, enacted in 1962, applies to all changes in use resulting in the severance of an appropriative right from appurtenant land and the transfer of that right to other land.¹²⁷ Under the procedure established by section 45-172, an appropriative right may be severed and transferred from one place of use to another with the approval and consent of the appropriator of the right.¹²⁸ The consent of additional water users also may be required, depending upon the original location of the right to be transferred.¹²⁹

In most cases, the severance and transfer statute requires that a number of conditions be met before the requested transfer will be approved.¹³⁰ For example, the applicant must establish that the requested transfer will not affect vested rights.¹³¹ In addition, the applicant must establish the validity of the

- 127. Id. § 45-172.
- 128. Id.

131. *Id*.

^{122.} *Id.* §§ 41-1001 to -1092.12.

^{123.} Id. § 45-114(B); see id. §§ 12-901 to -914.

^{124.} Id. § 45-163.

^{125.} See id. §§ 45-114(B), -172(A).

^{126.} Id. § 45-156(B).

^{129.} Id.

^{130.} See id. § 45-172(A).

appropriative rights to be transferred, including a submission of proof that such rights have not been abandoned or forfeited.¹³²

An application for the severance and transfer of an appropriative right must be submitted to ADWR.¹³³ Hearings on the application are then held, during which interested parties are permitted to appear and submit evidence opposing the application.¹³⁴ ADWR must approve the application before the proposed transfer may be implemented.¹³⁵

Anyone involved in a real estate transaction that will involve a change in the point of diversion or place or purpose of use of an appropriative right should carefully examine the legal issues involved in such changes prior to making any financial commitments. The hearings on such changes can be hotly contested, and an applicant has no assurance that ADWR will approve its request.

D. Effect of General Stream Adjudications

Prior to the enactment of the statute creating the permit system of appropriation in 1919, several different methods existed for obtaining an appropriative water right in Arizona. In part because of the confusion created by these different methods, Arizona began two general stream adjudications in the 1970s.

These two massive judicial proceedings cover the two largest stream systems in the state: the Gila River system and the Little Colorado River system.¹³⁶ The Gila River system covers most of central and southern Arizona, including the Phoenix metropolitan area. The Little Colorado River system includes much of the northeastern portion of the state. These proceedings are designed to recognize and prioritize all claims to water in each stream system.¹³⁷

An important early stage in the adjudication proceedings required all persons claiming appropriative rights in the stream systems to file a

^{132.} Id.

^{133.} See id. § 45-172(A)(7).

^{134.} See id. § 45-172(A)(7), (B).

^{135.} *Id.*

^{136.} See In re Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source,
No. W-1, W-2, W-3, W-4 (Consolidated) (Ariz. Super. Ct. Maricopa County); In re Gen.
Adjudication of All Rights to Use Water in the Little Colorado River Sys. & Source, (Ariz. Super.
Ct. Maricopa County) (Case No. 6417),
https://www.superiorcourt.maricopa.gov/SuperiorCourt/GeneralStreamAdjudication/gila.asp.

^{137.} For a more detailed discussion of the two general stream adjudications, see Joseph M. Feller, *The Adjudication that Ate Arizona Water Law*, 49 ARIZ. L. REV. 405 (2007).

Statement of Claimant ("SOC") setting forth the basis for their claim.¹³⁸ This requirement applied to all persons claiming appropriative rights, regardless of the basis for such claim.¹³⁹ If a person did not or has not filed an SOC, he or she arguably lost his or her appropriative right, even if the right was otherwise viable.¹⁴⁰

The deadline for filing SOCs in all watersheds to be adjudicated has now passed. A special procedure exists for appropriators with new uses to protect their rights in the adjudication.¹⁴¹ Any person seeking to appropriate water for a new use should comply with this procedure. Once each year, ADWR sends the necessary forms for including new uses in the adjudication to all persons listed in the Department's records as having undertaken a new use during that year.¹⁴² The proper forms also are available upon request from ADWR.¹⁴³

The adjudication proceedings are especially important to prospective purchasers because they are designed to determine the validity of all existing rights to use appropriable water.¹⁴⁴ Any entity looking to acquire property with an existing right should thoroughly investigate the status of that right in the adjudication before closing the transaction. If the prior owner has filed a proper SOC, the new owner can file an assignment and assume the prior owner's position in the adjudication proceeding.¹⁴⁵ If the prior owner has not filed an SOC, the new owner may need to move to intervene in the proceeding and file a late SOC.¹⁴⁶ As set forth above, the failure to file an SOC arguably can constitute forfeiture of the underlying water right.¹⁴⁷ For this reason, the prospective purchaser should be especially cautious to ensure that the proper papers have been filed.

V. FLOODPLAINS

With so much land in the state lying in floodplains, it is particularly important for potential land purchasers in Arizona to determine whether the

144. ARIZ. REV. STAT. ANN. § 45-252(A) (2013).

^{138.} ARIZ. REV. STAT. ANN. § 45-254 (2013).

^{139.} Id.

^{140.} Id.

^{141.} See id.

^{142.} *Id.*

^{143.} See Ariz. Dep't of Water Res., Adjudication of Water Rights, New Use Summons Frequently Asked Questions (Nov. 2, 2006), available at http://www.azwater.gov/azdwr/surfacewater/adjudications/faq.htm ("SOC FAQs").

^{145.} See generally ARIZ. REV. STAT. ANN. § 45-254 (2013); see also SOC FAQs, supra note 143.

^{146.} See SOC FAQs, supra note 143.

^{147.} See Ariz. Rev. Stat. Ann. § 45-256 (2013).

prospective property is in a floodplain. Floodplain delineations are often redrawn by the Federal Emergency Management Agency ("FEMA"), so buyers should check the latest FEMA maps to determine their risk. Accessing FEMA flood maps is as simple as accessing FEMA's Map Service Center through their website, which offers a variety of methods to find maps that include the property at issue.¹⁴⁸ Assessing this risk also helps determine what kind of flood insurance will be required.

Arizona also has county flood control districts established by statute, which assist ADWR in administering the State's flood plan management programs and delineating floodplains for the State's purposes.¹⁴⁹ A purchaser that wishes to develop land within a designated floodplain must first obtain a Floodplain Use Permit through such a district before beginning construction.¹⁵⁰ Failure to obtain such a permit can result in civil penalties and open the developer to civil liability resulting from flood damage.¹⁵¹ A purchaser who wishes to develop land within a floodplain should consult the rules and permitting criteria of the applicable county flood control district to determine if floodplain management would hinder or obstruct the proposed development.

VI. SUMMARY AND CONCLUSIONS

Taking the steps in a real estate transaction to ensure that all applicable water rights are transferred and secured is essential and can have substantial ramifications for purchasers. The primary concern is to determine what types of water rights apply and whether they have been properly preserved by the prior owner, and are transferable. In some instances, this will require filing one or more forms with ADWR or with the adjudication court. In other instances, it can involve a complex series of steps requiring several months to accomplish. In either situation, the required steps must be undertaken with caution in order to preserve the value of the underlying property.

^{148.} MapServiceCenter,FEMA.ORGhttps://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=firmHelp_1&title=How%2520to%2520Find%2520Your%2520Flood%2520Map(last visited Mar. 25, 2014).

^{149.} ARIZ. REV. STAT. ANN. § 48-3609 (2013); *see, e.g.*, FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, http://www.fcd.maricopa.gov/ (last visited Mar. 24, 2014).

^{150.} ARIZ. REV. STAT. ANN. § 48-3613 (2013).

^{151.} Id.