



## **Duty to Serve – The Role of Service Areas in Providing Water**

An AMWUA Staff Analysis

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### **Executive Summary**

Providing potable water to residents and businesses requires utilities to make enormous capital investments for pipes, treatment plants, reservoirs, and other critical infrastructure, and for this reason, they are considered to be “natural” monopolies. From a societal perspective, it would never make sense, for example, to pay for two parallel water pipes running down the same street and providing the same service to different customers. To achieve the least societal cost for the service, boundaries must be defined in which only one utility provides potable water.

Service areas are geographic boundaries that dictate where a utility, such as a water provider, may serve customers. This concept originated in feudal Europe as a component of franchises granted by a sovereign and were gradually incorporated into English and later United States common law. Today, water service areas play an essential role in ensuring communities have a reliable water supply and by helping to secure sound water management. Many states, including Arizona, have adopted statutes and regulations that clearly define the boundaries of service areas and structure how these areas are to serve the community. In Arizona, service areas are important for ensuring clarity in utility service, promoting long-term water resource planning, and implementing crucial components of the Groundwater Management Act. This importance was again underscored by the June 2023 release of the Phoenix Active Management Area (AMA) groundwater model that led to a pause on new growth that relies on groundwater outside of the service areas of providers that have a 100-year designation of assured water supply.

Questions about the role and benefit of water service areas have been raised when the Arizona State Legislature recently heard bills that compromise the integrity of service areas. This analysis provides historical context to explain how and why the responsibilities placed on service areas developed and remain crucial today. By also reviewing the early history of irrigation water and domestic water service in the Phoenix-area, we can learn from the problems that arose when service areas were not exclusive, were poorly defined, and were not comprehensive. Weakening the integrity of service areas would lead to real problems that have occurred in the past.

This analysis highlights how Arizona has benefited from the establishment and structure of water service areas, which have served as an essential guardrail to ensure that municipal water providers can continue to serve and meet the water demands of their residents and businesses.

## Development of Service Areas

A service area or service territory for water providers can be generally defined as the geographic area currently served by, or in the future planned to be served by, a provider. This definition is found in some form in city and county documents throughout the United States, Europe, and Canada. In particular, water utilities have service areas that dictate where they may provide water service, wastewater service, or both. Within its water service area, a water provider is responsible for providing sound infrastructure and clean water to residents. Service areas also play important logistical roles in functions such as city planning and emergency response.

The notion of utility service areas can be traced back to practices in feudal Europe. Sovereign rulers would issue a franchise to a subject, which was a grant of the sovereign's right for the express purpose of performing a public service that would have otherwise been within the sovereign's domain. Early franchises included building and maintaining bridges, roads, wharves, and markets.<sup>1</sup> Crucially, these franchises functioned as regulated monopolies. For example, inhabitants of a Medieval manor were required under a "mill soke" obligation to grind all their grain at a local lord's mill to compensate the lord for the considerable investment in constructing the mill. The mill was also the only way to make grain usable for baking and brewing in the entire area.<sup>2</sup> In return for providing the public service, franchise holders would be authorized to charge a toll or fee but were otherwise prohibited from charging other fees.<sup>3</sup> Lord Chief Justice Hale, an influential English barrister and judge, articulated this concept for wharves in 1670:

If the king or subject have a public wharf unto which all persons that come to that port must come as for the purpose to unlade or lade their goods, because they are the wharfs only licensed by the queen, ... there cannot be undertaken arbitrary and excessive duties or cranage, wharfage, pesage (fee for weighing), and so forth, neither can they be enhanced to an immoderate rate, but the duties must be reasonable and moderate ... For now the wharf and crane and other convenience are affected with a public interest.<sup>4</sup>

Implicit in Hale's description is that franchise owners had a "duty to serve" their customers, which meant that the public interest of operating a franchise required providing service even when it is not profitable.<sup>5</sup>

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<sup>1</sup> William L. Killion, "The History of Franchising" in *Franchising: Cases, Materials, and Problems*, ed. Alexander Moore Meiklejohn (American Bar Association, 2014), 5-6.

<sup>2</sup> Jim Rossi, "The Common Law 'Duty to Serve' and Protection of Consumers in an Age of Competitive Retail Public Utility Restructuring," *Vanderbilt Law Review* 55, no. 1 (October 1998): 1244-1245.

<sup>3</sup> *Ibid.*

<sup>4</sup> Quoted in Carl Pechman, "Regulation and the Monopoly Status of the Electric Distribution Utility," *National Regulatory Research Institute Insights* (June 2022): 1.

<sup>5</sup> Rossi, 1243.

As English Common Law was adopted and applied in the United States legal system and later enshrined in statutes and regulations, the duty to serve has been expanded into our current understanding of a public utility's obligations. These include obligations to extend service to all those within a service area, to provide continual and reliable service. It also prohibits a utility from discriminating against customers by limiting what services they may receive.<sup>6</sup> Fulfilling all of these expectations is no easy feat for any utility, especially in an arid state; therefore, these obligations underscore the necessity of careful resource and infrastructure planning, management, and investment so that municipal water providers can continue to meet the water demands of their communities while recovering the required costs to treat water and maintain infrastructure.

Although early utility service in the United States operated as franchises, current utility service largely operates through public providers or private entities that have a regulated natural monopoly. A regulated monopoly is subject to government oversight that prohibits the otherwise negative impacts of monopolies, namely the ability of the monopoly to drive up prices solely to make a profit or to cease innovation due to lack of competition.<sup>7</sup> These regulated natural monopolies are allowed to operate as the only provider of their specific service within their service area, so long as they provide their service with their duty to serve the public in a just way.<sup>8</sup> Providing essential public services is very capital intensive, and it therefore makes sense that these utilities operate as "natural" monopolies so as to save everyone the extra unnecessary costs of duplicating efforts.

### **Service Areas for Water Providers in Arizona**

Under Arizona law, a municipal water provider's<sup>9</sup> service area is simply defined as the area that is actually being served water by a city, town, or private water company for a non-irrigation use.<sup>10</sup> It is also important to note that a service area must contain an "operating distribution system" that is owned by one of these entities. In most cases, a water provider's service area also delineates where it provides wastewater collection and reclamation services, if the provider does indeed provide those services<sup>11</sup>.

Municipal water providers and their service areas are governed by both State and local governmental entities. Utilities operated by cities and towns are governed by their respective councils, as well as by laws passed by the State Legislature and rules issued by the Arizona

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<sup>6</sup> Ibid., 1243 and 1249.

<sup>7</sup> Pechman, 1

<sup>8</sup> Ibid., 2.

<sup>9</sup> A "municipal water provider" is defined as a city, town, or private water company in A.R.S. § 45-561(10).

<sup>10</sup> A.R.S. § 45-402(31).

<sup>11</sup> There are exceptions to this, with the most notable being Pima County, which is the only county in Arizona that provides water reclamation service to its residents. The Pima County Regional Wastewater Reclamation Department was established in 1948 to provide wastewater service to areas outside of Tucson, a role that was later extended to the city itself in the mid 20<sup>th</sup> century. Today, the department is the sole wastewater service provider for almost all of Pima County, except for a reclamation facility operated by the City of Tucson that provides reclaimed water for irrigation within the city.

Department of Water Resources (ADWR). Private water companies are also subject to these laws and rules but are governed by the Arizona Corporation Commission (ACC) rather than a city council.

### *Initial Boundaries*

A municipal water provider's service area generally lines up with the municipality's corporate boundary, but not always exactly. Beyond serving residents of their city, some municipal water providers have also agreed to provide water to areas outside of their municipal corporate boundaries. For instance, Phoenix provides water to parts of Paradise Valley. So long as these service agreements were entered into before the designation of the Active Management Area (AMA) containing the municipality, that served area is automatically considered part of the service area.<sup>12</sup>

Conversely, several AMWUA cities, as well as others, have areas within their corporate boundaries that do not receive municipal water service but are instead served by one or more private water companies. For example, Goodyear has four private water companies within its city limits. This arrangement may exist because a city annexed land into its municipal boundary without expanding its service area. Although Arizona law requires that annexed land is provided with "appropriate levels of infrastructure," a city is not explicitly required to extend city water service to the annexed area.<sup>13</sup>

However, aquifers and surface water bodies do not respect service area boundaries, and municipal water managers are still affected by what occurs outside of their own city's water service area. The city may therefore choose to purchase the private water company serving that area, and in that case, would absorb that company's water service area and infrastructure into its own, possibly through the exercise of eminent domain. It is uncommon but possible for there to be areas within a city's boundaries that have no water provider and instead rely on wells and septic systems. Any such areas are usually very limited, because cities have mechanisms to require these homes to hook up to the city's water system. For example, a city may require a proposed building to connect to its water system as a condition of being issued a building permit.<sup>14</sup> Such mechanisms are in place because they provide huge benefits for both city water management and public health, and are generally more cost efficient for developers and the eventual property owners. While domestic wells and septic systems are convenient for those in rural areas, they can be a liability in urban settings. Improperly maintained septic systems can cause soil pollution, and even an abandoned domestic well can create a route for contaminants to penetrate deep into the aquifer.<sup>15</sup> Having neighborhoods hooked up to city water systems also makes it easier to provide essential infrastructure such as fire hydrants and storm sewers, and help cities manage their water infrastructure as one unified system.

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<sup>12</sup> A.R.S. § 45-402(31)(a)(ii).

<sup>13</sup> A.R.S. § 9-471(P).

<sup>14</sup> For example, in City of Peoria Code § 25-20(B).

<sup>15</sup> U.S. Environmental Protection Agency, "Getting up to Speed: Ground Water Contamination", last revised August 2015, <https://www.epa.gov/sites/default/files/2015-08/documents/mgwc-gwc1.pdf>

The geographic boundaries of the service area of a private water company are defined in its Certificate of Convenience and Necessity (CC&N),<sup>16</sup> a document issued by the ACC that gives the private water company the right and the responsibility to provide water service. The company's CC&N may apply to water service, wastewater service, or both. Any private water company must acquire a CC&N before it can begin to construct any part of its intended water service infrastructure.

### *Expanding Service Areas*

There are several ways under Arizona state law by which a water provider within an AMA may expand its service area to new areas that it had previously not served:

- A common approach for a provider to expand its service area is by utilizing a Type 1 or Type 2 non-irrigation grandfathered right (GFR) to drill a well outside its service area. The well may also be drilled using a recovery well permit, which allows the provider to recover stored water (such as surface water). That area will become part of the provider's service area if the provider uses the well to serve water to the area "for municipal purposes" for a year.<sup>17</sup> However, a city cannot drill a new well outside of its existing service area solely to serve residents within its existing service area.<sup>18</sup>
- A provider may similarly use a GFR or recovery well permit to establish a "satellite service area" that is detached from its existing service area, subject to certain limitations. For instance, a water utility must have at least one customer within the proposed satellite service area before it can be established.<sup>19</sup>
- Service areas may also be expanded or established using surface water pursuant to a claim or CAP contract, or effluent that can be delivered directly from a treatment plant.
- Another expansion mechanism is "natural incremental progression,"<sup>20</sup> which allows a city to drill a well within its service area and then use it to serve a development that is just outside of its service area and in the direction that the city is naturally growing.

However, within an AMA, a provider is prohibited from expanding its service area to include a well field, serve "disproportionately large" amounts of water to an industrial user, or encompass irrigated acres to extinguish the right of the landowner in order to convey the

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<sup>16</sup> A.A.C. R14-2-402.

<sup>17</sup> Arizona Department of Water Resources, "Procedures for Establishing New Service Area Rights Within Active Management Areas (Substantive Policy Statement GW45)," last revised August 17, 2021, <https://www.azwater.gov/sites/default/files/2021%2008-17%20GW45.pdf>.

<sup>18</sup> A.R.S. § 45-836.01(B).

<sup>19</sup> Arizona Department of Water Resources, "Procedures for Establishing New Service Area Rights Within Active Management Areas (Substantive Policy Statement GW45)."

<sup>20</sup> This term was described in a 1995 letter from ADWR Phoenix AMA Director Mark Frank to the City of Chandler.

associated grandfathered rights for a non-irrigation purpose. A provider also may not expand its service area to serve groundwater for irrigation purposes.<sup>21</sup>

All the above mechanisms and restrictions apply to both municipal and private water companies. However, a private water company must also file for an amendment to its CC&N before it can expand its service area boundaries. The company's CC&N includes specific service area boundaries, and a private water company is not allowed to serve any customers outside of the area defined in its CC&N.<sup>22</sup>

## **History of Water Service in Arizona**

The evolution of urban development and municipal water services in the Phoenix-area gives insight into the nature and importance of well-defined water service areas for providing water. As the region grew dynamically and people settled in the harsh, arid environment, the initial domestic water providers over time proved unreliable for one reason or another, and Phoenix-area cities opted instead to handle their own water service. Consolidated water service under a single provider for the entire city gave residents stability and prevented the kind of price gouging and poor service quality that was caused by the existence of competing water providers in these growing cities.

### *Irrigation Systems*

Before 1912, when Arizona was a territory, water usage largely involved diverting water from rivers and streams to irrigate agricultural lands.<sup>23</sup> The first major American water resource projects in Arizona involved developing canals and a dam on Tucson's Santa Cruz River in 1857 and irrigation canals in Phoenix's Salt River Valley in 1867.<sup>24</sup> Both projects led to a thriving agricultural and pastoral economy in these regions that eventually gave rise to the creation of two of Arizona's largest municipal water providers.

In the beginning, there was no unified approach to planning for these canals or marking their boundaries and rights similar to service areas, which led to a complex latticework of canals and contentious arguments over water rights. Prior to the passage of the Reclamation Act in 1902, the system of canals stemming from the Salt River was managed very loosely. Anyone could establish a canal company and dig a canal with little outside oversight, leading to a proliferation of these companies beginning in the 1870s. Without a single entity to oversee the canal system, litigation and conflict over water rights were rife. For example, when the Arizona Canal was under construction in the late 1880s, it faced a lawsuit from Charles Hayden, an influential businessman and probate judge, who accused the canal company of taking water needed to

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<sup>21</sup> A.R.S. § 45-493.

<sup>22</sup> A.A.C. R14-2-402.

<sup>23</sup> Doug Kupel, "Urban Water in the Arid West: Municipal Water and Sewer Utilities in Phoenix, Arizona" (PhD diss., Arizona State University, 1995), 45.

<sup>24</sup> Kupel, "Urban Water," 46. Doug Kupel, "Diversity Through Adversity: Tucson Basin Water Control Since 1854" (MA thesis, University of Arizona, 1986), 28.

run his mill in Tempe. Another more complex lawsuit pitted the Arizona Canal Company against the Tempe, Utah, Salt River Valley, Maricopa, Grand, Mesa, and San Francisco Canal Companies who collectively alleged that the Arizona Canal was diverting their water.<sup>25</sup> Some landowners were even forced to physically defend their canals to protect their ability to use the water to which they technically had a right. In 1903, the *Arizona Daily Gazette* described this canal system as the “worst system that human ingenuity could devise for the distribution of water for the irrigation of the Salt River Valley.”<sup>26</sup>

This haphazard approach persisted until the creation of the Salt River Valley Water Users Association (SRVWUA) in 1903. The association was created as a way for residents to offer their lands as collateral for the general funds to build what became known as the Salt River Project (SRP), which was the first reclamation project authorized under the Reclamation Act. This reclamation project involved building Roosevelt Dam to generate power and store the river’s waters.<sup>27</sup> It was successful in part because all individual canal companies were incorporated into SRP in the early 1900s, creating a largely unified irrigation system.<sup>28</sup> A 1910 judicial decree from Judge Edward Kent that established the priority of surface water rights for every section of farmland in the Salt River Valley also helped ensure that there would be considerably less acrimony in managing canal systems moving forward.<sup>29</sup> In 1917, the SRVWUA took control of SRP from the Bureau of Reclamation, and therefore took control of Roosevelt Dam and the series of irrigation canals coming from the Salt and Verde Rivers.

Phoenix entered into its first contract with the SRVWUA for irrigation water in 1919, which began a process of consolidating canals.<sup>30</sup> Originally, the Salt River Valley Canal went right through the center of Phoenix and a series of laterals brought water from that canal to irrigate the farms and yards of individual landowners. As Phoenix grew, the placement of canals eventually became an impediment to the city’s management of its own water infrastructure within its service area. In 1926, Phoenix and the SRVWUA modified the Salt River Valley Canal so that it no longer flowed through the center of town, and Phoenix began a series of projects to minimize residents’ constant crossing of irrigation canals when traveling in the city.<sup>31</sup> The movement of major canals and laterals to areas outside the city center meant that it became more and more costly for the city to provide irrigation water to city residents, at a time when city officials had undertaken a rapidly growing responsibility to provide domestic water to its citizens. Before long, Phoenix officials began to consider stopping irrigation services altogether. The city eventually raised irrigation rates substantially in both 1935 and 1936, which put the

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<sup>25</sup> U.S. Bureau of Reclamation, Lower Colorado Region, “A Century of Cooperation: Reclamation in Arizona (Pre-1899),” accessed October 8, 2023, <https://www.usbr.gov/lc/phoenix/AZ100/1899/managewater.html>. Salt River Project, *The Story of SRP: Water, Power, and Community* (Tempe: Salt River Project, 2017), 6, <https://www.srpnet.com/assets/srpnet/pdf/about/history/Story-of-SRP-History-Book.pdf>.

<sup>26</sup> Salt River Project, *The Taming of the Salt* (Tempe, Arizona: Salt River Project, 1979), 113.

<sup>27</sup> U.S. Bureau of Reclamation, Lower Colorado Region, “A Brief History of Roosevelt Dam,” accessed October 1, 2023, <https://www.usbr.gov/lc/phoenix/projects/rooseveltdam/rdhistory.html>.

<sup>28</sup> Salt River Project, *The Story of SRP*, 88.

<sup>29</sup> *Ibid.*, 28-29.

<sup>30</sup> Kupel, “Urban Water,” 62.

<sup>31</sup> *Ibid.*, 70.

city out of the irrigation business.<sup>32</sup> Many of the canals and laterals remained, especially in suburban areas, but residents formed cooperatives to create their own SRVWUA contracts instead of receiving irrigation water through the city. As the city urbanized, laterals were moved underground until only the largest of the SRP canals remained, and irrigation deliveries in the city's core stopped almost entirely.

### *Domestic Water Systems*

Domestic water use in early Phoenix was seen as secondary to water for irrigation, but it was still obviously necessary for a growing urban population. After Jack Swilling, one of the pioneer founders of Phoenix, led a team to successfully dig a ditch along a prehistoric Hohokam canal—which would later be called the Salt River Valley Canal—in January 1868, the Phoenix town commissioners purchased water from the canal and began to provide irrigation and domestic water to citizens through a series of ditches that went through the center of the growing town.<sup>33</sup> Aside from wealthier residents who were able to rely on wells and tanks for personal household needs, Phoenix residents in the 1870s depended on water from the irrigation ditches, which was sometimes of questionable quality due to upstream pollution. However, some businesses during this time, notably saloons and hotels, began building their own small water distribution systems that were supplied by wells. Other businesses followed suit to develop water supplies for the benefit of their customers. Many installed pumps to draw water from wells or ditches for fire protection. As a result, the city's water distribution infrastructure looked like a constellation of canals and small distribution systems. As the city's population continued to grow into the 1880s, the amount of wastewater increased, which degraded the groundwater residents tapped for their water supply and increased the prevalence of waterborne disease.<sup>34</sup>

In 1883, Phoenix officials undertook their first major water distribution project when they lined many of the city's canals with concrete to prevent seepage in the dirt-lined ditches. That same year, they also started fining anyone that was found to be wasting water.<sup>35</sup> By 1885, water quality concerns led City of Phoenix officials to seek a stable groundwater supply for domestic use by drilling a 500-foot deep well for the public in front of the newly constructed Maricopa County Courthouse.<sup>36</sup> The city's common council also began considering requests to grant a franchise to build and operate a city-wide waterworks system.

In 1889, the city granted a request by John Gardiner—who previously built a water supply and delivery system for the Phoenix Hotel and his woodworking shop—to grant his Phoenix Water Company (Company) a franchise to serve drinking water to the city's residents. This franchise, which was an exclusive right granted by the city, was the first modern domestic water service area in the Salt River Valley. The Company built the city's first fully underground distribution

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<sup>32</sup> Ibid., 72-73.

<sup>33</sup> Ibid., 49.

<sup>34</sup> Doug Kupel, *Fuel for Growth* (Tucson: University of Arizona Press, 2003), 34-35 and 46-47.

<sup>35</sup> Kupel, "Urban Water," 51.

<sup>36</sup> Kupel, *Fuel for Growth*, 46-52. Kupel, "Urban Water," 90.



system and water treatment plant, which treated 2 million gallons of groundwater per day.<sup>37</sup> The Company was required to provide as much water as necessary to the city's fire hydrant system, and to continue increasing water production and distribution system coverage to keep pace with Phoenix's rapid population growth, escalating pressure on the Company to meet the water needs of a growing service area.

Many years of unreliable service and increasing rates eventually led the city to acquire the Phoenix Water Company in 1907 and assume the duty to serve the water demands of its residents, turning it into what would become today's Phoenix Water Services Department.<sup>38</sup> Phoenix acquired a private sewer system in 1911, and began providing wastewater service to city residents<sup>39</sup>. The private sewer company had previously been disposing raw sewage at a site near the Salt River, and in 1915 Phoenix upgraded the site to begin actual wastewater treatment efforts. The city completed its first full-scale wastewater treatment plant in 1932. Phoenix grew rapidly through the 1950s, and during this period many suburban areas within the city were served by private water companies that utilized wells and septic systems. Similar to what occurred in the city center during Phoenix's early years, these private water companies routinely experienced well contamination from poorly maintained septic systems.<sup>40</sup> Customers of these private utilities made their grievances known, and many customers actively petitioned Phoenix to acquire their water providers.<sup>41</sup> Over time, Phoenix acquired these private water companies for two explicit purposes: to put a stop to widespread contamination of groundwater under the city's suburban areas and to expand the city's water service area to generate more revenue and be able to further improve the city's water infrastructure.<sup>42</sup>

Additionally, starting in the late 1940s, Phoenix and other municipal water providers began establishing new arrangements—called Water Delivery and Use Agreements—with SRP for delivering SRP water within their respective service areas<sup>43</sup>. Under these agreements, water providers pay SRP the annual dues that are associated with water delivery to lands within the provider's service area that are also part of SRP's service area ("on-project" lands). SRP then directs the water to the provider rather than individual landowners, and the provider uses the water to serve "on-project" areas on behalf of SRP. Sending SRP water to water providers rather than to individual customers allows the water to be treated to a quality that is sufficient for domestic use, instead of the raw river water that was provided for irrigation. These agreements also provide greater flexibility in how this water can be used because they allow the diversion of SRP supplies to areas that previously would not have been able to receive this water. Rather than having to receive SRP water through canal systems, residents can now

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<sup>37</sup> Kupel, "Urban Water," 107.

<sup>38</sup> *Ibid.*, 186.

<sup>39</sup> City of Phoenix "Phoenix Water Service Celebrates its 100<sup>th</sup> Anniversary, A Brief History," accessed November 14, 2023, [https://www.phoenix.gov/waterservicessite/Documents/d\\_038000.pdf](https://www.phoenix.gov/waterservicessite/Documents/d_038000.pdf)

<sup>40</sup> Michael Logan, *Desert Cities: The Environmental History of Phoenix and Tucson* (Pittsburgh: University of Pittsburgh Press, 2006), 121.

<sup>41</sup> *Ibid.*, 122.

<sup>42</sup> *Ibid.*, 121.

<sup>43</sup> Kupel, *Fuel for Growth*, 157-161.

receive the same water through their provider's distribution system. Lastly, these agreements reinforced the responsibility of a water provider to serve their customers and gave them access to more water resources with which to do so.

### **Importance of Service Areas for the Groundwater Management Act**

With the passage of the 1980 Groundwater Management Act, service areas assumed a significant role for managing groundwater use in Arizona, particularly within active management areas where the majority of the state's population resided and where stricter regulations were imposed. For example, municipal water providers must account for their groundwater and meet conservation requirements within their service area. Also, service areas delineate where water providers are allowed to pump and transport groundwater for the benefit of their customers.<sup>44</sup>

There are some instances where others may pump groundwater within a provider's service area. For example, SRP may pump groundwater from wells it owns that are within the service area of a municipal water provider. However, this pumping by SRP is closely controlled through agreements (such as Water Delivery and Use Agreements) between SRP and municipal water providers. Exempt wells, which are used for non-irrigation purposes and pump less than 35 gallons per minute, are also allowed to be drilled by others within a provider's service area.<sup>45</sup> These wells are typically used by private homeowners and are "exempt" because, except for well construction standards, they are not regulated by Arizona's Groundwater Code. Some pumping associated with GFRs also occurs within municipal service areas, particularly pumping undertaken by industrial users for purposes not served by the provider's water system.

On the opposite side, Arizona courts have upheld the prohibition on water providers pumping groundwater outside of their service area, notably in *Cortaro Water Users' Association v. Steiner* in 1985. In that case, the City of Tucson sought to drill three wells to pump groundwater from within the boundaries of the Cortaro-Marana Irrigation District. The Arizona Court of Appeals ruled against Tucson and ADWR, which had granted the well permits, and declared that a water provider may not go outside of its service area to drill new wells for the purpose of serving new customers.<sup>46</sup>

Service areas also influence the Assured Water Supply (AWS) Program. Under the AWS regulations, a Designation of Assured Water Supply (DAWS) covers a municipal provider's entire service area.<sup>47</sup> A DAWS is the gold standard for consumer protection under the AWS Program because it ensures that all customers of a utility are protected. If service areas were no longer used to delineate the area served by a utility, it would also be difficult for a utility and for ADWR to determine what area should be covered by the utility's DAWS. Service areas also help

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<sup>44</sup> A.R.S. § 45-492.

<sup>45</sup> A.R.S. § 45-454.

<sup>46</sup> *Cortaro Water Users' Association v. Steiner*, 148 Arizona 343, 714 P.2d 836 (Ariz. Ct. App. 1985).

<sup>47</sup> A.A.C. R12-15-714.

developers know which rules are applicable to a development. Subdivisions not located within the service area of a provider with a DAWS must obtain a Certificate of Assured Water Supply (CAWS), while those within designated service areas do not.<sup>48</sup> Ultimately, service areas help ensure sustainable water management.

The relationship between service areas and the AWS Program also has implications for Central Arizona Groundwater Replenishment District (CAGRDR) membership. The CAGRDR has two membership types: member lands and member service areas. Individual subdivisions that wish to obtain a CAWS must enroll as CAGRDR member lands to demonstrate that they have sufficient access to renewable supplies to offset their 100-year groundwater pumping. A water provider may enroll its entire service area and become a CAGRDR member service area if it wants to obtain a DAWS that is partially reliant on mined groundwater and that requires replenishment to meet the AMA's management goal. Member service areas are statutorily required to encompass a provider's entire service area and are an essential tool for some providers to be able to comply with the AWS Program.<sup>49</sup> Clearly defined service areas help CAGRDR both keep track of its replenishment obligations and ensure that costs for new supplies are paid for.

### **Challenges Facing Service Areas**

In the past two years, the Arizona State Legislature has considered a handful of bills that would undermine some basic tenets of service area. One introduced in the 2023 session, House Bill 2535, would have prohibited a municipality from regulating a well in a previously unincorporated area that had been annexed by the municipality. It would have also prohibited a municipality from regulating any building or structure that required water from that well. Although Governor Hobbs vetoed this bill, these prohibitions would have undermined a municipal water provider's ability to safely manage its water distribution system as well as fire protection and other safety services expected from a municipality. For example, many municipal providers require annexed properties to comply with municipal fire codes and to install backflow prevention devices, both of which are necessary for the well-being of their service area but would have been prevented from doing so by the legislation.

Another set of bills introduced in the 2022 and 2023 sessions would have undermined the integrity of service areas. Both Senate Bill 1171 (2022) and Senate Bill 1660 (2023) would have allowed a qualifying food and beverage manufacturing facility that pumps groundwater using a Type 2 non-irrigation grandfathered right within a wastewater provider's service area to categorize wastewater that they treated on-site as a new type of effluent. These facilities would be allowed to store this new effluent underground to accrue long-term storage credits that they could later recover on-site.<sup>50</sup> Notwithstanding different problems associated with this

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<sup>48</sup> A.R.S § 45-576(F).

<sup>49</sup> A.R.S. § 48-3780.

<sup>50</sup> "Griffin strike-everything amendment to Senate Bill 1171 dated March 22, 2022, Fifty-fifth Legislature, Second Regular Session (2022)," accessed November 8, 2023, <https://www.azleg.gov/legtext/55leg/2R/adopted/H.1171NATURAL%20RESOURCES%20ENERGY%20%20WATER.p>

special-interest legislation including undermining Arizona’s three-decades old Underground Storage Act, this legislation incentivizes industrial users to split off from a water provider’s service area and establish their own island-like service areas, similar to what many businesses undertook in later 19<sup>th</sup> century Phoenix. Allowing individual customers to avoid contributing to the community’s water system potentially increases costs for all other customers. Fragmenting established service areas by preventing a wastewater provider from receiving the effluent generated by these food and beverage facilities undermines the ability of these providers to serve the long-term needs of their customers. Both bills ultimately failed to pass out of the Arizona House of Representatives, but they reaffirm the importance of Legislators only taking action that supports, not undercuts, the ability of municipal water providers to meet their responsibility to provide water for the long-term viability within their respective service areas.

At the end of 2022, after numerous forewarnings, the City of Scottsdale stopped providing water to a standpipe used by haulers that transported water to the community of Rio Verde Foothills, an area without its own water provider and that is outside of Scottsdale’s water service area and city limits. Scottsdale had allowed the use of its water to Rio Verde for years, but had warned Rio Verde residents that the city would not be able to provide water to the standpipe indefinitely in order to safeguard its water for its residents, especially in light of anticipated Colorado River shortages. While residents of Rio Verde Foothills could haul water from other places in the region, it would be costly and time-consuming. Rio Verde Foothills no longer having access to Scottsdale’s water made international news, and State Legislators sought to address the issue by introducing several bills. Senate Bill 1093 and House Bill 2561 both sought to require cities that once provided water through a standpipe to people residing outside of their water service area to continue doing so, but contingent upon certain conditions. These conditions included that providing water through a standpipe could not harm the city’s ability to serve its own citizens, and that there were no other available water supplies. Even with acknowledgment of water service areas, the legislation remains problematic because it undermines the right of water providers to manage their own resources and customer base. Defined water service areas provide essential assurances to municipal residents and established businesses, and requiring a provider to serve water to people outside of its water service area fundamentally jeopardizes those assurances. It should go without saying that municipal water providers want everyone, not just their customers, to have secure water service; however, a provider’s first and foremost duty is to serve its own customers, and anything that requires a municipal water provider to cast aside or weaken that duty can have dire consequences for public health.

### **Practical Usefulness of Service Areas**

Clearly defined service areas are useful and effective for protecting public health and meeting the various water needs of communities. Defined boundaries for a water provider facilitate essential activities, such as developing groundwater and surface water supplies, constructing

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df. “Senate Engrossed version of Senate Bill 1660, Fifty-sixth Legislature, First Regular Session (2023),” accessed November 8, 2023, <https://www.azleg.gov/legtext/56leg/1R/bills/SB1660S.pdf>.

treatment facilities, establishing water distribution systems, and overseeing the collection and treatment of wastewater. It is extremely costly to construct, manage, and maintain assets like treatment plants, distribution systems and wells, with operational and maintenance costs adding financial challenges. It is, therefore, beneficial for communities to have water service areas function as “natural monopolies” to minimize the duplication of efforts and assets.<sup>51</sup> Cities and towns often operate their own water utilities because they have the ultimate responsibility for serving their citizens. To that end, Arizona statute requires that any municipality granting a utility franchise must first receive approval from its voters.<sup>52</sup> Additionally, although private ownership of water utilities was dominant in the 19<sup>th</sup> century, public ownership became more common as private companies faced difficulties simultaneously maintaining profits and a sound water system.<sup>53</sup> City water utilities provide water service at the cost of service for supplying and delivering this essential service to their residents.

The security that clearly defined service areas offer also enables water providers to prioritize sound water management. With clearly defined service areas, utilities can allocate revenues towards long-term resource acquisitions and infrastructure projects that will be best for their customers, rather than having to compete with a neighboring utility for market share. Similarly, clear service areas enable customers to hold their water utilities accountable for inadequate service or excessively high rates and charges. Service areas are particularly beneficial for managing water in an arid environment. Establishing water distribution systems that overlap not only wastes capital assets, but it also risks wasting water through system losses.

## Conclusion

Service areas are a centuries-old institution that continue to provide clarity on which customers utilities, franchises, and other regulated providers have an obligation to serve. The services provided within these areas are a public good, whether that takes the form of water needed for various daily functions within one’s home or power to keep a business’s lights on. Proposals that undermine the integrity of service areas do not cause theoretical problems, but ones that have a historical reality.

The first decades of the City of Phoenix were replete with instances of overlapping service areas for canals and fragmented individual water systems constructed by businesses. The poor management created by this haphazard approach not only undermined the certainty of having water service, but also created hazards to the water quality of the aquifer and to public health, including outbreaks of diseases. Resolving these issues by creating a clear, uniform service area for the City of Phoenix’s water utility was an essential foundation that has enabled this metropolis to grow and prosper for over 140 years. Those benefits have been replicated

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<sup>51</sup> Scott Masten, “Public Utility Ownership in 19<sup>th</sup>- Century America: The ‘Aberrant’ Case of Water,” *The Journal of Law, Economics, and Organization*, 27, no. 3, (2011): 604.

<sup>52</sup> A.R.S. § 9-501.

<sup>53</sup> Masten, 617.

multiple times throughout Arizona, with municipal water providers fully assuming the duty to serve the residents and businesses in their service areas.

To that end, under the Groundwater Code, service areas have helped define where sustainable development can occur. Strengthening, rather than weakening, this foundation will ensure that the 4.9 million people who call the Phoenix metropolitan area home will continue to thrive.