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# LEVERAGING THE VALUE OF WATER

## *Arizona cities pioneer water allocation policies and achieve economic development goals*

Amanda Smith – Sonoran Institute and  
AZ Water Association Water Conservation Committee



Rapidly growing communities eager to provide jobs often compete, even if indirectly, for development. When projecting water demand and calculating water supply at build-out, water resources departments rely on their community's general plan and land use zoning. However, commercial and industrial water demands vary wildly with each user. With opportunistic economic development, this variation can introduce uncertainty in water use projections and place the resiliency of a community's water supply at risk. Effective water management and efficient water use provide the foundation for a thriving economy. To ensure sustainable growth in communities, water providers and land planners must work together to plan, invest, and conserve.

Municipalities in Arizona plan for up to 100 years into the future to ensure water supply resiliency, and base these plans on estimates of average water use associated with land use zoning. What happens when actual water usage exceeds

these estimates? How do municipalities ensure a consistent water supply for all water customers? Communities, such as the cities of Chandler, Mesa, and the Town of Gilbert, pioneered a solution to this problem, coined the Water Allocation Policy. These policies enable these municipalities to market their communities as having reliable water supplies while increasing water resiliency, adding certainty, and supporting economic development goals.

Water allocation policies do not change how a water provider assesses water demand or economic impact. Rather, they add an enhanced water resources perspective to a city planning and economic development review, thus allowing the cities to guide responsible stewardship of water for new industrial and commercial development projects.

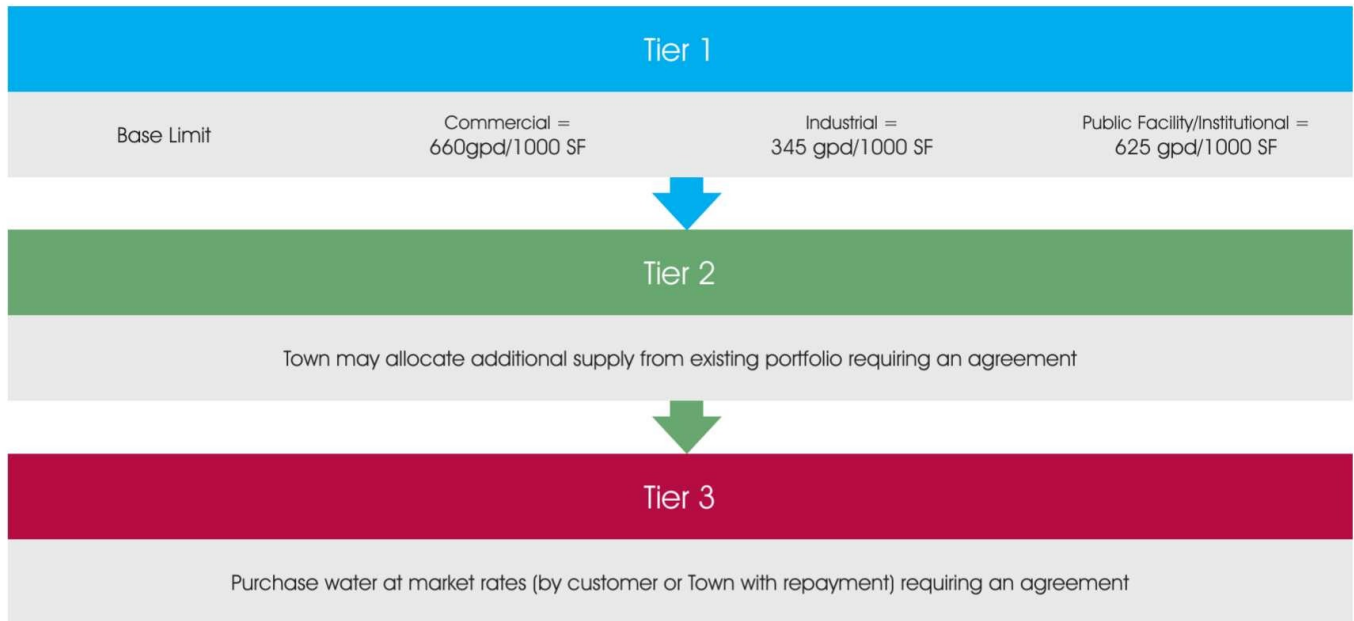
The goals of water allocation policies are to safeguard current water users, provide adequate resources for future customers, and assure new customers fit into the overall

development-planning framework. Additionally, these policies accomplish these goals by institutionalizing water resource considerations within the city's planning and economic development review.

Despite being relatively new, more communities are seeing the value of water allocation policies, and best practices have started to surface. A panel of Arizona water resource managers, economic development, and community development planning professionals, along with elected officials, gathered for the first Arizona Growing Water Smart workshop, hosted by the Sonoran Institute and the Babbitt Center for Land and Water Policy in February 2020.

The multi-day training and assistance program focused on integrated land and water resources planning. For the benefit of AZ Water Association members, this article summarizes the critical components of an allocation policy and some potentially helpful policy recommendations other cities might implement.

## Gilbert's tiered approach to allocating water



### BASIC ELEMENTS OF WATER ALLOCATION POLICIES

Each water provider tailors policies to its own community, but the basic premise is this: allocation policies guarantee a baseline of water supply for each new development and use a tiered decision-making framework to consider the needs of above-average water users.

Non-residential development proposals fall into a tiered system based on the difference between their proposed water demand and the projected demand for their land use zoning. Proposals requiring only the base water allocation fall into Tier 1 and require no further review for developmental approval – this is the case for the vast majority of water users.

For a few potential large non-residential water users, the planners must further evaluate the impact of the proposal. Projects requiring more than the base allocation and meeting certain economic development criteria supporting the city's vision fall into the second tier.

Tier 2 projects receive the additional water requested, on a case-by-case basis.

Projects fall into Tier 3 if they require additional water and do not meet specific goals defined by the City Council. Cities may approve Tier 3 projects if the developers can procure their own 100-year water supply to match the same standards the municipalities must guarantee to their service areas. In this way, allocation policies leverage the community's existing water supplies and ensure that new

developments do not infringe on existing customers' water service reliability.

The most important concept about allocation policies is they can protect and assure water availability for existing users while weighing the impact of new projects. By design, they avoid approving a new development with a high water demand without first analyzing benefits to the community. These large users may have to supply their own water resources. The water allocation policies do not impact existing water customers and residential development because existing water uses are known, and residential demands are fairly predictable and uniform in nature.

### DETERMINING TIER, THRESHOLDS, AND CRITERIA

To set the thresholds, the city water resources department carefully examines their water data and master plan(s) to set water demand projections for each non-residential parcel. For example, Chandler's policy considers proposals at or below the projected water demand as Tier 1 users. The Town of Gilbert and the City of Mesa used multipliers to set their Tier 1 threshold higher than their projections. In all three communities, the vast majority of developments are within the first tier of water users, and there are no changes to the review or approval process.

In rare cases when a development requires more than what the provider projected for that parcel, the provider will consider the project as a Tier 2 or Tier 3 water user.

Tier 2 water users have projects that support the economic development needs of a city, such as the diversification of highly valued employment opportunities or redevelopment goals. Stakeholders such as economic development staff, City Council, and citizen advisory groups pre-determine these criteria. A best practice is for cities to embed the criteria in the policy's language, so that evaluations are determined in a timely, transparent, and consistent way.

Tier 2 allocations legally tie the approved water demand to that location in the city. If a Tier 2 water user leaves the city, the user's remaining Tier 2 water allocation returns to the city's water inventory or transfers to a new user at that location with approval from the city council.

A Tier 3 development is one that does not meet the specific goals of the city.

These projects will receive the base allocation and will have to provide the remaining 100-year water supply. The development must dedicate the full 100-year supply to the City upfront to meet the Arizona Department of Water Resources Assured Water Supply Rules.

While Chandler and Gilbert use three tiers, Mesa uses a two-tiered approach: developments requiring more than the base allocation must undergo a detailed review and determination process to understand their additional water supply needs.

### FITTING THE ALLOCATION POLICY INTO THE PLANNING PROCESS

Water resources and planning staff can map their planning review process together and identify points to integrate water resources management.

An initial pre-application meeting allows department staff to review the developers' proposals and provide feedback and comments.

Assigning a new water user to Tier 1, 2, or 3 occurs early in the application process. At this time, Tier 1 users move forward unchanged, while provider staff inform Tier 2 and 3 projects of their status, policy details, and the need for sustainable water use agreements. If the developer agrees to move forward, water resources staff will work with the planning staff to craft an agreement tailored to each project.

### GENERATING ADDITIONAL SUPPORT AND BUY-IN FOR THE ALLOCATION POLICY

Initially, City Council members and economic development staff held concerns that policies like this could send the message that the community cannot or will not support future growth. Innovative policies such as these

Managing water responsibly increases resiliency and is a vital part of Arizona's long-term planning in the desert. When we are efficient with our water, we are investing in our future.

indicate the community is a responsible steward and is committed to delivering a consistent and assured water supply for all existing and future developments.

After staff discuss the policy framework with City Management and elected officials, and receive direction to proceed, the next step is for staff to engage stakeholders and inform them of the new policy impacts.

In Gilbert, the ordinance protects existing water users from the effects of new water users. Based on these protections, the Gilbert Chamber of Commerce agreed to provide letters of support. Economic development staff scheduled one-on-one meetings with large landowners and developers.

The Town staff used in-depth examples of their facilities to demonstrate how this could affect them or others like them and incorporated feedback from these meetings

into the final details and the application process for Tier 2 users.

Lastly, Water Resource staff met with each Councilmember and explained the process in the same way they presented it to the industries. Subsequently, Gilbert's Council unanimously approved the policy.

In the beginning, Chandler sought to incorporate multifamily developments in the allocation policy as well, however, staff determined it unnecessary as zoning and land use codes already regulate this sector. Residential demand is fairly predictable based on density and landscape compared to the range of variation seen across non-residential development projects.

Chandler passed this ordinance in response to a high number of non-residential water use developments. Additionally, Chandler staff met with existing customers



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to advise them that the new policy would not affect them in most cases. However, if they were to expand or re-develop their facilities and the increased demand required additional or larger water meters, the City would require developers to follow Chandler's new development process and water allocation policy.

**ALLOCATION POLICIES  
COMPLEMENT OTHER JURISDICTIONAL  
EFFORTS TO CONSERVE AND EFFICIENTLY  
MANAGE THEIR WATER RESOURCES**

The allocation policy brings water resource consideration into multiple stages of the planning review process. Integration of water resources into the land use planning discussions enables implementation of water efficiency codes on all new projects, not only the biggest projects under an allocation policy. This includes citywide ordinances on low-water-use landscaping practices, low-impact development, green infrastructure, and indoor plumbing efficiencies. This policy creates the space to develop additional water efficient policies. For example, Mesa developed its allocation policy alongside a suite of other sustainability ordinances.

Allocation policies have been beneficial for the municipalities and improved staff relationships. Developing the policy is inherently collaborative, requiring input from planning and economic development. The collaboration process improves relationships and information exchange, thus streamlining the planning process. In Chandler, interdepartmental communication has improved dramatically and the process of creating the plan forged strong relationships.

**ADDITIONAL ADVICE**

The advice from Chandler is to do the work early. As Chandler approached build-out, leadership recognized the importance of linking undeveloped land with its future water demand to ensure those demands could be met with its remaining water supply. A water allocation policy could prove to be an even greater benefit for a city young in its development. It can be very difficult to convey the importance of maintaining balance between water supply and water demand, particularly when a city is small and growing rapidly and new development is enticing. However, equity for all landowners to develop on their own schedules, with

a sufficient water supply to do so, is a core message underpinning a water allocation policy. City planners ought to explain to stakeholders early and often how careful water resource planning can help cities flourish, and how limited water supplies might stifle city growth if not properly managed by all departments.

**INTEGRATION OF LAND AND  
WATER INTRODUCES NEW TOOLS  
TO MANAGE WATER DEMAND**

The way developers design and build new projects can have a significant impact on municipal water demand. While land use planning authorities, economic development teams, and water resource managers typically operate within separate departments or entities, all ought to work together closely and respond to development opportunities. This fragmentation can create communication gaps and missed opportunities. When these entities come together, they can identify and implement actions like water allocation policies to benefit the entire community. Managing water responsibly increases resiliency and is a vital part of Arizona's long-term planning in the desert. When we are efficient with our water, we are investing in our future.

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