



SENT VIA ELECTRONIC MAIL

July 25, 2023

Ms. Jaimie Galayda
Lead Planner
Public Information & Conservation Office
City of Tucson/Tucson Water

RE: Comments on One Water 2100 Plan

Dear Ms. Galayda:

Tucsonans, perhaps more than those in most other regions people, know the importance of water and sound water management practices. We've embraced the ethics of conservation and stewardship. Our past efforts as a City, community and utility have demonstrated that this precious resource can be nurtured in a way that protects our supplies while sustaining economic growth and community prosperity. Our resources are abundant and have been built to sustain a future with less water. We have decoupled demand from water use, resulting in Tucson becoming the envy of most other communities in the desert southwest. This success should be celebrated but not taken for granted. There is more that can be done.

Our organizations recognize the importance of the Tucson One Water 2100 Plan (the Plan). We support Tucson Water's ongoing efforts to manage our water resources for present and future generations. Through the collective efforts of our community, we believe we can achieve a balance between use and conservation that allows our region and economy to flourish for many years to come. As noted in the Plan, when considering multiple scenarios, Tucson Water has sufficient water resources to meet demand through the year 2100. It's up to all of us to work collaboratively to ensure that this happens. This draft is a very strong step in the right direction.

We are very appreciative of the opportunity to provide comments on the Plan and the efforts of Tucson Water to get us to this point. Through the input of key stakeholders and the public, the Plan can be finalized in a way that achieves the Tucson community's social, environmental and economic objectives. In this letter, we have highlighted key "themes" (captured under 'General Comments') that highlight priority focus areas and more detailed comments and questions on specific parts of the Plan (captured under 'Specific Comments').

General Comments

- **Use of Data to Support Fact-Based Decisions** – We request the incorporation of additional data to support and prioritize the recommendations in the Plan. It is through the use of detailed information and data that decisions can be made to properly manage our water resources.

- **Use Cost-Benefit Analysis to Guide Decisions** – The recommendations in the Plan and/or the resulting implementation strategies, should be supported by a cost-benefit analysis whenever possible. While properly managing our water is the top priority, the specific actions necessary to do so should bear a close relationship to the cost or impact.
- **Increased Emphasis on Water for the Economy** – Ensuring there is enough water for the economy and conserving our resources is not, in our opinion, mutually exclusive. The Plan’s Vision Statement properly acknowledges “quality of life” as a foundational element of One Water. This cannot be achieved if our residents do not have high-quality and high-paying jobs. As technology improves, especially in water recycling for industrial uses, our water resources can be maximized while ensuring that Tucson also maintains a thriving economy.
- **Partner with the Private Sector** – Several of the recommendations (i.e., new policies and regulations referenced in the Plan) will affect private sector businesses especially those in the real estate, development and construction industries. It is highly probable that the recommendations in the Plan will increase the cost of doing business for most businesses in these areas. We are happy to facilitate meetings with our members and other professionals in order to help achieve the goals of the Plan while mitigating its impacts on their businesses, consumers and other stakeholders.
- **Regional Collaboration & Community Engagement** – Southern Arizona’s water future and success is linked through the coordinated efforts of multiple local governments, tribal partners, municipal and private water providers, private sector businesses, stakeholder groups and the public. As noted in the Plan, a substantial portion of Tucson Water customers are located outside of the City limits. Tucson Water’s infrastructure crosses multiple jurisdictional boundaries and relies upon agreements with other water providers. In particular, the nature of the bifurcation of water and wastewater between the City and County, and the effort to secure the Tucson Water CAP allocation were predicated on regional collaboration and benefits to the community as a whole. As noted in section 1.1, engagement of stakeholders and partners is a distinguishing feature of the One Water approach. We agree and recommend the Plan and its implementation steps emphasize the importance of regional collaboration and community engagement.
- **Optimizing Water Re-Use is Key for Our Future** – The City of Tucson and Tucson Water are pioneers in community wide conservation efforts. We recognize these efforts, along with Tucson’s commitment to protecting Lake Mead and advocating for Arizona’s share of Colorado River Water, have put us in a strong position for a secure water future. This position would be enhanced with increased efforts to recycle water including utility scale direct potable reuse. These strategies are the next frontier in water management. They require careful study and evaluation before implementation, however, we urge Tucson to expedite this effort in light of significant benefits.
- **Celebrate and Acknowledge Increased Water Efficiency/Conservation in New Construction** – Increased efficiency in development and construction has helped Tucson “decouple” demand

from population growth. Homes and apartments built today use much less water than the majority of existing Tucson Water customers. Yet, there will still be continued improvements to conserve even more water like the use of Water Sense plumbing fixtures. Yet there are several references in the Plan – primarily attributed to responses from survey respondents – that frame new development as a burden to our water supplies. We encourage Tucson to embrace the efficiencies of new construction and minimize such references. We also seek to work proactively with Tucson to identify strategies where we can work together.

Specific Comments

ES.2, 1.3.3 Guiding Principles – We request a stand-alone guiding principle in support of Economic Growth as it is as important as the other guiding principles outlined in the Plan.

ES. 4 – Community Engagement – Our organizations understand the challenge of trying to balance the appropriate level of community and stakeholder engagement with having a process that is so cumbersome it makes completing the Plan impossible. Now that the draft has been completed, we offer our assistance in coordinating meetings with leading business organizations to discuss and consider how the planned activities will affect the professional sectors. This type of coordination would help develop lasting partnerships needed over the life of the Plan.

ES.7 Vulnerabilities and Opportunities – We ask Tucson Water to reconsider references that imply Population growth, land use changes and economic factors are vulnerabilities. The Plan accurately notes that total water use in the region has declined despite a growing population (and by inference land use changes and a growing economy). With respect to population growth, we suggest it would be more appropriate to say modify the language to something like, “unforeseen population growth that exceeds historic norms and future projections.” Similarly with land use changes which require approval by governmental bodies. It seems very unlikely there would be a future scenario where land use changes that adversely impact water are approved. It might be more appropriate to say, “a breakdown in the current process for approving land use changes that results in less efficient use of water.” It is also unlikely that future economic factors or commercial uses of water are less efficient than present use. It might be more appropriate to say, “failing to consider water management as part of our economic development strategy.”

ES.9 – Prioritization of Strategies, RW-1 – New Policies for Water Reuse – We request Tucson Water work with private sector representatives, including real estate developers, on the evaluation and development of policies for water reuse in buildings. Additional data, such as quantification of water savings, should be incorporated to this process along with use of a cost-benefit analysis.

ES.9 – Prioritization of Strategies, RW-2 Purifying Recycled Water – As referenced in our ‘General Comments’ strategies like purifying recycled water for custom uses appears to have great potential. We appreciate the inclusion of this strategy and encourage the evaluation of such be one of the highest priorities.

ES.9 Prioritization of Strategies, S-2, S-3 Stormwater – We request Tucson Water work with private sector representatives to include those regulated and impacted by the Plan on evaluation and development when seeking to integrate or expand stormwater standards, policies and practices. For

example, Pima County is currently updating their landscaping code. This creates an opportunity to standardize storm water design requirements across all jurisdictions.

ES.9 – Prioritization of Strategies, S-4 Stormwater – Please provide details of proposed increases to the storm water fees.

ES.9 – Prioritization of Strategies, I-2 Demand Incentives - We request Tucson Water work with private sector representatives regulated and impacted by the Plan on evaluation and development of incentive programs for residential and commercial customers.

1.2.1 Role of the Plan – In addition to the items listed, partners should use the Plan to guide economic development strategies and facilitate job growth, which we recommend be included as another bullet point.

1.3.2 Water Management Key Partners – Tucson Water may want to consider including other partners such as the University of Arizona, Central Arizona Water Conservation District, PAG and the City of Tucson PDS department.

1.3.3 Water Service Area Policy – The practical effects of the Water Service Area Policy are not as straightforward as implied in the Plan. For many landowners, it has been challenging and time consuming to navigate the policy and have left them uncertain about the ability to secure water service and move forward with their projects. We request an opportunity to discuss this matter with Tucson Water and work collaboratively to find mutually beneficial solutions to these challenges.

1.4 Tucson Water Management History – Has the City explored constructing additional recharge areas so that excess CAP can be “banked” into the aquifer immediately? Has Tucson Water considered a recharge location in the Southeast? If so, we would like to better understand the pro’s and con’s identified in this analysis.

1.4.2 Drought Preparedness and Response Plan – We agree the Drought Plan will need to be updated once Post 2026 Operational Guidelines development. Further, we encourage the Plan strategies be based on actual impacts to Tucson Water’s resources, not solely on shortage conditions of the River. Stakeholders, including those in the development and business communities, should be engaged as the Plan is implemented and updated. As previously mentioned, not issuing PADA’s in a Tier 2 Shortage may result in development projects being stalled and impeding housing supply and job creation.

1.4.3 Plan Tucson – While it is clear throughout the document, in this section it may make sense to clarify “the Plan” referenced at the start of the third sentence is referring to the One Water Plan and not Tucson’s general plan.

Collaborative Plan Development, Phase 4 Plan Implementation – What, if any, is the CIP in the 2024 Fiscal year? Has Tucson Water anticipated the amount needed annually for the next 5, 10, 25 years? Are there opportunities for stakeholders to support these planning efforts and corresponding investments?

Chapter 2 Collaborative Plan Development, Phase 3 – Community Engagement & Adoption – We agree presentations were made upon request, a Townhall was conducted and workshops were hosted. This effort solicited broad community input. Similarly, the final Plan will benefit from targeted stakeholder meetings, especially with the development community, to solicit specific input and feedback on Plan concepts and recommendations.

2.2.1 Economic Variability - Please clarify definitions of “business connections.”

2.3.6 Public Surveys – We appreciate the efforts to survey residents to garner insight on their perceptions and priorities. This information is beneficial to the planning process. References to the statistically valid survey appear multiple times. Who was the national research firm that did the survey and are the cross-tabs publicly available? Will Tucson Water continue to do this type of research over the life of the plan to continue to gain insight from the public?

3.1 Tucson One Water Cycle – In this chapter, or another appropriate place in the Plan, there should be a chart that notes the volume of water, in acre feet, of Tucson Water Supplies for type of water. For example, the pie chart in Section 3.1 includes percentages for Colorado River, Remediated Groundwater, Recycled Water and Stormwater Harvesting but it does not specify a volume of water in acre feet.

3.2 Surface Water – We recommend including language that reflects a commitment to working collaboratively with ADWR, CAP, water providers and other stakeholders on a unified approach for the State’s position with respect to negotiations with other basin states and the Bureau of Reclamation.

3.2.1 Central Arizona Project – We recommend including language that emphasizes the City’s support for the CAP and preserving as much of the Colorado River allocation to the CAP as possible during negotiations with other basin states and the Bureau of Reclamation.

3.2.2 Recharge and Recovery – Are there potential issues or impacts to our aquifer (i.e., a hydrological disconnect) with the Tucson Water locations for recharge and recovery?

3.3 Groundwater – Does the Plan quantify the total amount of allowable groundwater to be pumped (separate from LTSCs)? If not, please include. Please clarify water level declines due to groundwater pumping by others.

3.3.2 Assured Water Supply – Please provide links/documentation for the 2023 application to modify Designation of Assured Water Supply (DAWS).

3.3.3 Central Arizona Groundwater Replenishment District – Is there an amount of groundwater that could be pumped associated with Tucson’s membership in the CAGR? If so, how much annually?

3.3.4 Arizona Water Banking Authority – Please describe if any of the 847k+ acre-feet of LTSC’s will be available to augment or enhance Tucson’s water resources in the time of shortage conditions. Who has priority for accessing AWBA credits?

3.3.5 Remediated Groundwater – Please specify the amount of water currently and potentially available through TARP and all other groundwater resources.

3.3.6 Water Quality – There is no question that water quality is of utmost importance, but it should also be recognized that there are costs for achieving quality, especially when Tucson Water’s operational targets exceed Federal requirements. Tucson Water should provide detailed information about the cost differential between meeting and exceeding Federal requirements for treatment. How many of the 230 drinking water wells are located within the Tucson City limits?

3.4.1 Reclaimed System – What is the total amount of reclaimed water available to the City of Tucson/Tucson Water? We request to be part of the process that contemplates expanded use of reclaimed water. What are the costs and benefits of expanding the reclaimed water system?

3.4.2 Groundwater Recharge – How much of the City’s wastewater entitlement is discharged into the Santa Cruz without earning LTSCs? We request the City of Tucson/Tucson Water prioritize seeking ways to earn LTSCs from this water source. What is the cause of the groundwater pumping that has resulted in a decline in groundwater levels to a point that necessitated SHARP?

3.4.3 – Greywater – The cost for homebuilders to comply with this requirement is approximately \$1,000 per home, but past City research findings have shown that very few homeowners use grey water even when they are aware their home is plumbed for this purpose. This appears to be an example of where the concept sounds better than the resulting water savings.

3.4.5 Direct and Indirect Potable Reuse – How much water are we talking about that could be reused? What would the effect of this use be on our system? How would it alleviate strain on other supplies? What are the costs to do this? We see this as an important strategy and request the City of Tucson/Tucson Water expedite the planning and potential implementation of DPR/IPR.

3.5 Stormwater – How much water are we talking about? What is the cost of realizing this type of water use? A cost-benefit analysis should be completed when looking to develop new policies and regulations. We request to be part of any policy/regulatory development in this area. There appears to be no reference to the commercial rainwater harvesting ordinance which could be acknowledged as an accomplishment in this area.

3.5.1 Residential Rainwater Harvesting Rebate Program – What is the amount of potable water that has been conserved through this program? What is the cost of the program?

3.5.2 Storm to Shade Program – What is the cost-benefit analysis related to this program?

3.7 Future Water Supply Opportunities – Please clarify whether “recycled water” referenced here includes IPR/DPR. If it does not, IPR/DPR should be identified specifically.

4.1 Today’s Water Uses – As the plan notes, while 93% of Tucson Water customers are residential, they consume only 70% of the water. New policies, regulations and conservation strategies should be geared toward non-residential customers. Additionally, we request a detailed analysis of single-family usage compared to multi-family usage.

4.1.1 Per Capital Water Use Trends – We applaud Tucson Water for acknowledging that water demand has been “decoupled” from population growth and the extent which residential demand has declined. We ask that the City of Tucson/Tucson Water further consider the decline in water usage for new homes compared to existing homes in future policy development and conservation strategies.

4.2 Water Conservation – We request the use of a cost-benefit analysis when developing new conservation strategies and/or evaluating existing strategies and programs.

4.2.1 Rebates and Incentives – What are the amounts of each rebate and the total amount available? What would be the budget for new rebate programs? Do those monies need to be allocated by Mayor & Council from the General Fund?

4.2.5 Advanced Metering Infrastructure – The analysis that is referenced in the Plan should be shared publicly. It appears the concept of “Smart Metering” is highly cost effective, but we’d like to see if the analysis supports that assertion. We would also like to know how this program is to be funded. This is likely a conservation strategy that could become a top priority. For the near term, has Tucson Water considered offering smart meters to customers who would like to purchase them for their homes?

4.2.6 Non-Revenue Water Management Program – Please provide estimates of what amount of water is being lost through non-revenue or unaccounted for water.

4.2.7 Drought Preparedness and Drought Plan – We applaud Tucson Water for acknowledging that shortages on the River do not immediately translate to shortages for Tucson’s water supply. This point is critical and should be continually emphasized with policymakers and the public.

4.2.8 Drought Policy Responses – To our knowledge, the amount of water savings associated with these tactics and the cost of implementation have not been quantified. If this has been done, we request that this information be shared. It is essential to have direct and proactive collaboration with the development community when developing the Low Impact Development ordinance and Net Zero Water policy.

4.3 Future Water Demand Vulnerabilities – How is acquiring other service areas a vulnerability? Is there an increase in supplies if Tucson Water acquires water companies? If so, has that increase been projected and how much water does that potentially represent?

4.5.3 Supply and Demand Comparison – We appreciate the efforts Tucson Water has undertaken to analyze different future scenarios. This will help us make thoughtful and sound management decisions. Does Tucson Water or the Plan contemplate potential change in classifications or categories of water rights, particularly agricultural rights (conversion to residential)? If so, how would this impact water supplies?

5.3 Water Supply Strategies – Please provide examples of opportunities for increasing the amount of locally developed and controlled water supplies.

5.3.2 Groundwater Strategies – New homes and residential communities have significantly improved water efficiencies. This has allowed our population to increase without straining our water resources. This is not reflected in references from survey respondents who feel new development is a “threat” or usage needs to be “curbed.” We ask Tucson water to consider removing these references if they represent a small segment of respondents and are not actual recommendations or strategies.

5.3.4 Stormwater – We recommend the references to written comments to expand stormwater capture to existing homes and businesses and mandating onsite capture and storage be removed or clearly identified as not being actual recommendations or strategies as part of the Plan.

5.4.2 Monitoring and Mandates - We prefer the “carrot” approach to the “stick” approach. Any mandates should include a cost-benefit analysis and quantify the amount of water saved. The city is already mandating water efficient fixtures. We also ask to be included in the development of water use guidelines that are referenced as a medium priority.

I-1 Low Income Support – What is the funding source for low-income assistance programs? Are there opportunities to work collaboratively on improving outreach?

I-3 Modifying the Tiered Rate Structure. Should be approached cautiously with sensitivity to potential unintended consequences on those with the least ability to pay.

Chapter 6 – Implementation – Please provide a dollar amount range for the low to high relative expenses.

6.1 Implementation Actions – Cost-Benefit and feasibility analysis for these proposals is critical and must be undertaken immediately.

Table 6.3, RW-1 C – We asked parties that would benefit from incentives for on-site reuse be included in the development of these actions.

Table 6.4, S-2 B – We encourage Tucson to include representatives from the private sector in the Regional Taskforce.

Assuring a safe, reliable and predictable water supply is of tantamount importance to all of us who live and work in the Tucson region. As principal stakeholders potentially most impacted by mandates and also those who can bring resources and technology to bear in helping to achieve our agreed upon water goals, our organizations look forward to working with you as the One Water Plan moves forward.

Sincerely,



Shawn Cote
Government Affairs Director
Tucson Association of Realtors



David Godlewski
President & CEO
SAHBA



Courtney LeVinus
President & CEO
Arizona Multihousing Association