MEMORANDUM

Date: March 16, 2021

To: The Honorable Rex Scott, Member
   Pima County Board of Supervisors

From: C.H. Huckelberry
       County Administrator

Re: City of Tucson Water Policy Related to Differential Water Rates

Based on your request, I am providing a historical overview of water and sewer service in eastern Pima County. Originally, the City and the County jointly created the Metropolitan Utilities Management Agency in the mid-1970s for the purpose of providing regional sewer and water service to eastern Pima County. Unfortunately, within a few years this agency was dissolved leading to the Intergovernmental Agreement between the City and the County to merge the sewer system in 1979 based on the assumption that the County would provide regional sewer service and the City would provide regional water service.

This concept is verified in the City of Tucson’s request for a municipal Central Arizona Project (CAP) water allocation wherein their service map at the time was significantly larger than the size of the City of Tucson in 1977.

As we know, CAP was delivered to the region through the Central Arizona Water Conservation District. That District is a special taxing district in the county in which the CAP canal delivers water. All property owners in Pima County including those in the unincorporated area who may not be served by Tucson Water pay the property tax levied by the District.

The City has been discussing a differential water rate option for some time, justifying such an action based on such differential rates charged by cities in the Maricopa County area. One of the basic financing principles associated with utilities is the concept of “cost of service.” This is simply an equity consideration that requires the charge for any customer for service be reasonably related to the actual cost of that service. Charging differential water rates among the same class of customers violates this principle and in all cases generates excess revenue for use by the municipality for something other than water service.

Attached is a policy report that provides more detail on this subject, including the history of water and sewer service in Pima County since the mid-1970s to date. (Attachment 1) Also, per your request is a draft resolution that you could offer to the Board for consideration if it is desired to take a policy position on this matter. (Attachment 2)
For a host of reasons, I believe differential water rates are inappropriate and cannot be supported by the historical policy evolution of water and sewer service in Pima County.

CHH/anc

Attachment

c: Jan Lesher, Chief Deputy County Administrator
   Carmine DeBonis, Jr., Deputy County Administrator for Public Works
   Yves Khawam, PhD, Assistant County Administrator for Public Works
City of Tucson Differential Water Rates Proposal
Pima County Analysis

March 2021

Background
The purpose of this analysis is to provide context for additional water fees considered by the City of Tucson for unincorporated Pima County properties. This context is presented through the lens of representations made and concessions granted by the greater metropolitan region from the period when the dissolution of the Metropolitan Utilities Management Agency (MUM) resulted in the City-County Sewer Intergovernmental Agreement of 1979\(^1\) to the present. The 1979 Agreement is particularly important as it captured the intent underpinning regional water and sewer services, to include Central Arizona Project (CAP) and reclaimed water allocations.

Management of County and City sewers proved highly problematic under MUM, due to enactment of new regulations, equitable cost sharing and ownership of the metropolitan facilities exacerbated by changing City limits associated with annexations. This context generated a multi-year comprehensive analysis culminating in a June 9, 1978 report to the City of Tucson Mayor and Council and the Pima County Board of Supervisors recommending that the metropolitan sanitary system be consolidated under County management\(^2\). The selection of County over City was favored due in part to the broader tax base of the County providing greater financial flexibility and strength for the long-range capital needs of the sewer system. This was substantiated by a November 1977 special election in which qualified electors of the City voted in favor of authorizing the City to transfer its sanitary system to the County.

It is noteworthy that the 1979 Agreement negotiation happened at a time of crisis when the U.S. Environmental Protection Agency (EPA) was demanding that the County and City establish a single coordinated regional wastewater system to serve the area in exchange for tens of millions of dollars in federal grants to finance an expanded and upgraded wastewater treatment system needed to comply with the then recently enacted 1972 Clean Water Act. Compounding this context was the City attempting to settle the water rights claims of the Tohono O'odham Nation, which threatened the continued ability of Tucson to operate a water utility.

In 1978, the City of Tucson was the sole large regional water provider generating flows into the public sanitary system tributary to the metropolitan treatment facilities\(^3\). It was therefore reasonable that the recommendations provided City ownership over the effluent produced from these facilities, in addition to allowing the County to retain 10 percent for its use. These recommendations were memorialized in the 1979 Agreement.

All Pima County Residents Contribute to Repayment of CAP Capital Costs
Due to the drawdown of the Tucson region aquifer and the need for renewable resources, the Pima County Board of Supervisors adopted a resolution in 1967 urging Congress to enact legislation for the construction of

---

\(^1\) Pima County Board of Supervisors Resolution 1979-78
\(^3\) Flowing Wells Irrigation District, University of Arizona and Davis-Monthan Air Force Base contributed a combined minute share of flows.
the CAP. Joining the Central Arizona Water Conservation District (CAWCD) required committing to service debt associated with construction of the CAP and so there was much public discussion on this topic, as recorded in the minutes of the May 4, 1971 Pima County Board of Supervisors Meeting. This discussion culminated in February 13, 1975 with the adoption of Resolution 1975-20.

Of note is that throughout the process leading to joining CAWCD, the discussion did not mention domestic water recipients as it was generally assumed that the City of Tucson was the regional water provider and that it would continue to perform in that capacity into the future.

Substantiating the Tucson position as a provider of regional water service is the map submitted by the City when applying for its original CAP water allocation. The Figure 1 map shows a City of Tucson 1977 incorporated area of 49,555 acres in blue, compared to a water service area into the unincorporated County of 228,450 acres in green. This water service area, comprising 78.3 percent of unincorporated County land, was used to estimate population projections that determined CAP allocations to the City via a Record of Decision issued by the U.S. Secretary of the Interior on March 24, 1983.

**Figure 1**

*City of Tucson Original Application for CAP Water Map*
Figure 2 shows the current Tucson Water Service boundary, which has been expanded from that of the initial CAP allocation request in areas annexed by the City, but has also been reduced in other areas contrary to the City of Tucson CAP representation for allocation.

The City is not currently delivering its full CAP allocation and is storing its unused amounts exceeding current demand for future customers and to hedge against shortages. Although 66 percent of its water customers are within the city jurisdiction, Tucson has 79 percent of the regional municipal and industrial CAP allocation.

The City of Tucson is the largest beneficiary of CAP in Pima County even though capital cost funding construction of the CAP is borne by all Pima County property owners. All Pima County residents pay a CAP tax levy for the cost of construction and operations of the CAP, but not all residents benefit from access to CAP water. All property in Pima County is assessed a 14-cent per $100 assessed valuation comprising 10 cents for Central Arizona Water Conservation District and 4 cents for the Arizona Water Banking Authority to
store water underground and purchase long term storage credits. In 2020, residents in Pima County paid $12.9 million to the District. Of that amount, City of Tucson residents paid $5.3 million. Residents in unincorporated Pima County paid an equivalent amount, $5.3 million. Residents in Oro Valley, Marana and Sahuarita paid the remainder. These amounts are summarized in Table 1.

### Table 1

<table>
<thead>
<tr>
<th></th>
<th>Ad Valorem Secondary (Rate = 0.10)</th>
<th>Water Storage Secondary (Rate = 0.04)</th>
<th>Total (Rate = 0.14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of South Tucson</td>
<td>25,113.09</td>
<td>10,045.24</td>
<td>35,158.33</td>
</tr>
<tr>
<td>City of Tucson</td>
<td>3,782,667.90</td>
<td>1,513,067.16</td>
<td>5,295,735.06</td>
</tr>
<tr>
<td>Town of Marana</td>
<td>623,069.36</td>
<td>249,227.75</td>
<td>872,297.11</td>
</tr>
<tr>
<td>Town of Oro Valley</td>
<td>724,074.46</td>
<td>289,629.78</td>
<td>1,013,704.24</td>
</tr>
<tr>
<td>Town of Sahuarita</td>
<td>275,515.44</td>
<td>110,206.17</td>
<td>385,721.61</td>
</tr>
<tr>
<td>Unincorporated Pima County</td>
<td>3,793,420.48</td>
<td>1,517,368.19</td>
<td>5,310,788.67</td>
</tr>
<tr>
<td><strong>Total for 2020</strong></td>
<td><strong>9,223,860.73</strong></td>
<td><strong>3,689,544.29</strong></td>
<td><strong>12,913,405.02</strong></td>
</tr>
</tbody>
</table>

Data provided by Pima County Finance and Risk Management on 2/18/2021

In addition to paying these two tax levies, County residents on smaller private water systems supplied through wells impacting the aquifer within the Tucson Active Management Area (AMA), pay an additional CAWCD tax to the Ground Water Replenishment District based on water consumed, thereby creating a further disparity with Tucson Water users.

**Effluent Entitlement Benefits the City Disproportionally**

The 1979 IGA established control of effluent based upon the City of Tucson being the only major water provider in the county, managing the total water resources of the Santa Cruz River Basin and adjacent basins. The IGA preceded clarification from the Arizona Supreme Court where it was determined that the utility treating the wastewater controlled the resulting effluent. The 1979 IGA allocates the City control of 90 percent of effluent, with separate agreements with water providers for effluent share, from the county’s two metropolitan wastewater reclamation facilities after deductions for the Southern Arizona Water Rights Settlement Act and the remaining ten percent to the County.

**The Value of Effluent Produced by Pima County Metropolitan Facilities**

---

4 Central Arizona Water Conservation District website: Property Taxes (cap-az.com)

The 1979 IGA was the product of large federal investments in wastewater treatment without thought that these funding sources would end. The reality was very different. Following the EPA initial investments, the County absorbed the entire responsibility and cost of complying with federal water quality standards. The County produces recycled water suitable for either indirect or direct potable reuse treatment per Arizona Department of Environmental Quality standards and provides it to the City free of charge. It costs Pima County $3,265 to treat and produce an acre-foot (af) of Class A+ reclaimed water. In 2019, Pima County produced 26,401 af of effluent for the City at a cost of $86.2 million. By comparison, the City purchases CAP water at a cost of $211 per af, equating to a cost of $5.57 million for the same volume of water Pima County provides the City at no charge. The County subsidizes $86.2 million in treatment costs for recycled water suitable for potable reuse, a class of renewable water that will become vital as the Colorado River Basin experiences shortages and CAP supply is reduced. The City also benefits from effluent generated outside its jurisdiction. The 1979 IGA no longer reflects the reality of water and wastewater service and cost in Pima County, disproportionally benefiting the City of Tucson.

City Water Service in Unincorporated Pima County is Established City Policy

The 1979 Intergovernmental Agreement between the City and County states that “…effluent is a major water resource that must by controlled by the City of Tucson in order to maintain management of total water resources of the Santa Cruz and adjacent water basins” (Article III.A). The 1979 IGA made no reference to either limited service area or differential rates. It further established that the City will endeavor to use effluent in such a manner as to preserve the underground water supply and minimize costs to water rate payers in City and County” (emphasis added).

The City cites 34 percent of their water customers live outside of the City jurisdiction, but the City established this long-standing policy by agreeing to serve water in unincorporated Pima County. Indeed, The City application for CAP water represented a service area comprising 78.3 percent of unincorporated County land. The City fully intended to serve outside its jurisdiction when it chose to serve isolated areas, such as Catalina, Diamond Bell, Corona de Tucson and others, without the City’s intention or requirement to annex these remote areas into the City.

While the City notes other jurisdictions in Arizona charge differential rates, none of these jurisdictions intended to be regional water providers. The City of Tucson, however, demonstrated clear intent to be the regional water provider within the 1979 agreement through control the regional water basins, the request for CAP allocations and reclaimed water from the metropolitan facilities. The City of Tucson and Pima County are unique in that the 1979 agreement established the City as the regional water provider and the County as the regional wastewater provider. No other county in Arizona has statutory authority for regional wastewater management.

Tucson Water Service Area Policy

The proposed differential fees are the third portion of a series of proposed fees assessed to residents in unincorporated Pima County. The others being a $750 application fee for pre-annexation and a $1,000 fee for equivalent dwelling units for properties requesting water service pursuant to the Tucson Water Service Area Policy.

In 2010, the City of Tucson adopted water service policies in an attempt to control growth for long-term water sustainability, the reality of controlling growth is very different since only limited regulation precludes numerous small developments from drawing down the aquifer within the Tucson AMA outside the Tucson Water service area.

Since Tucson Water is the only provider currently delivering CAP water via recharge and recovery infrastructure, it is logical to infer that un-nuanced refusal to serve outside obligated areas exacerbates
water sustainability, as other domestic water service options lack access to a renewable source. In addition and due to limited distribution infrastructure, water providers other than Tucson Water contribute to a hydrological disconnect between where water is being pumped and where it is replenished. These issues were discussed and captured by the City/County Water and Wastewater Study Oversight Committee in 2008\(^6\). The City notes the cost of new water infrastructure to unincorporated area, but the City does not bear these costs; they are borne by the entity developing the property.

Since adoption of water service policies, the City of Tucson has denied over 283 water service requests with many more requests not formally submitted due to the fact that no exemptions to the policy have been granted. A recent example includes the Southeast Employment and Logistics Center economic catalyst project located on Pima County lands in the Fairgrounds area. Even though these lands constitute an island surrounded by Tucson Water obligated service areas, Tucson Water existing policy precludes water service. This has forced Pima County to create a Domestic Water Improvement District (DWID) to serve this area, using existing water rights and recovery wells drawing from effluent recharge credits.

Instead of incentivizing renewable water resources, the Tucson Water Service Area Policy will likely promote increased reliance on groundwater dependency. Parcels denied service into Tucson Water’s service area are likely to be on groundwater and will remain so. Newly developing areas denied water service will either be groundwater dependent or enroll in the Groundwater Replenishment District. Although the GRD must replenish groundwater pumped, it is typically replenished outside the area of hydrologic impact. Consequently, without access to renewable water resources, expansion areas and unobligated areas will contribute to declining local groundwater levels. In areas denied water service surrounding the Tucson Water service area, the Arizona Department of Water Resources will issue permits to drill exempt wells per ARS 45-454 (C) (D) (1-4).

While Tucson staff is suggesting that annexation into remote areas is the solution to mitigate these issues, recent history has shown that the perceived benefits of annexation to property owners will likely not be enough to overcome these issues, thereby contributing to their further exacerbation.

**Differential Water Rates Appear to be Arbitrary and Punitive**

The City’s proposed differential rates to water customers in unincorporated Pima County appears to have no relationship to the cost of service as reported by City staff. Instead, City staff has explained this is a land use policy to force annexation into the City and to increase state-shared revenue. Tucson Water acknowledges there is no assessment, rate analysis or rationale for the 10, 20 or 30 percent proposed water fee increase and has explained there are no increased cost associated with delivering water to customers in unincorporated Pima County. A differential fee should be justified through rate analysis, otherwise it is arbitrary. The City has also not identified how the proposed increased revenue will be used, stating it could go to the General Fund.

Increasing fees to Tucson Water customers in unincorporated Pima County appears to be punitive, considering these residents already contribute to repayment costs for CAP water that benefits the Tucson Water resource portfolio as described above. Differential rates will further place an undue financial burden on county residents in unincorporated Pima County, especially for low-income customers. The County has approximately the same proportion of low-income customers as the City.

---

\(^6\) [Water & Wastewater Infrastructure, Supply & Planning Study ... (pima.gov)](https://pima.gov)
Furthermore, residents in unincorporated Pima County paid approximately 37 percent of the municipal sales tax, working, dining and shopping in 2011. Based on the population ratio between City and unincorporated County residents, it equates to unincorporated residents paying almost as much City sales tax as Tucson residents per capita.

Initiating water service as a regional water provider and then subsequently arbitrarily raising rates for one class of consumers without a service cost-basis, creates an additional inequity to ratepayers that lack political representation through either the City of Tucson Mayor and Council or the Arizona Corporation Commission.

City Authority to Charge Differential Fees
The City states it has authority to charge differential fees, citing A.R.S. §9-511. However, §9-511.01(D) stipulates the fee must be just and reasonable. The proposed fees appear to be neither just nor reasonable, City staff having described them as having no cost-of-service basis or rationale.

The Myth of Increasing State Share Revenue through Annexation
As a matter of policy, the County does not oppose or support annexation into the City or other incorporations. At the February 3, 2021 CWAC meeting, staff noted annexation could bring up to $42.6 million in increased state-shared revenue, referring to County Administrator Huckelberry’s June 17, 2016 memorandum to the Board of Supervisors.

City staff failed to mention these statewide tax revenues are shared, meaning an increase through annexation results in decreases for all other existing cities and towns. Additionally, the County would see losses in state-shared revenue in categories that rely on unincorporated population as a distribution factor, such as Vehicle License Tax. To assume annexation would decrease County expenditures, such as road maintenance, is simplistic and fails to take into consideration the numerous regional services provided to all county residents, incorporated and unincorporated; the courts system, elections, public health, library system, regional parks, County Attorney Office and others.

Moreover, Mr. Huckelberry’s 2016 memorandum demonstrates cities with populations similar to unincorporated Pima County have annual budgets that far exceed the $42.6 million in increased state shared revenue by factors ranging from 9.5 to 12, demonstrating that new communities or annexed areas would need to rely on increased taxes in addition to state-shared revenue increases. Believing that annexing unincorporated areas or new cities will result in a tax decrease is a fallacy; the exact opposite would occur.

City staff is indicating that increased state-shared revenue through annexation is an objective of the proposed differential fees. However, there is no cost/benefit analysis of expanding city services to unincorporated areas.

Conclusion
The proposed differential rates to water customers in unincorporated Pima County appear to be neither just nor reasonable and violate the intention of the 1979 agreement to provide regional water service. As such, Pima County staff recommends against differential water rates in unincorporated Pima County for both new and existing water customers. Implementing this proposal could have adverse consequences for sound regional water resource management, will likely be ineffective in promoting annexation and will generate

---


8 Memorandum from C.H. Huckelberry to Pima County Board of Supervisors, June 17, 2016
inequity with residents in unincorporated Pima County. Pima County does not charge differential fees for regional wastewater services.

In order to support regional economic and sustainability priorities, County is willing to work with City to expand the water service policy to allow service to properties outside the obligated service area where infrastructure exists or can reasonably be extended based on regulatory context and principles of sustainability.
RESOLUTION NO. 2021-____

A RESOLUTION OF THE PIMA COUNTY BOARD OF SUPERVISORS AFFIRMING SUPPORT OF JURISDICTIONAL RATE PARITY FOR TUCSON WATER CUSTOMERS

WHEREAS, Pima County and City of Tucson entered into an Agreement in 1979 turning over regional sewer resources to the County and regional water resources to the City, and

WHEREAS, the City of Tucson at that time functioned as the de facto regional water provider, with services extending significantly beyond City limits north to Catalina and south to Diamond Bell Ranch and Corona de Tucson, and

WHEREAS, all property owners in unincorporated Pima County pay equivalent Central Arizona Project tax as City of Tucson property owners, thereby not only disproportionately subsidizing renewable water for Tucson Water customers, but also some property owners are deprived of receiving Central Arizona Project water due to arbitrary City of Tucson Water service boundaries and

WHEREAS, the City of Tucson is the only regional water utility with recharge and recovery infrastructure requisite for sustainable aquifer hydrological continuity, and

WHEREAS, the City of Tucson is the only regional water utility with a reclaimed water delivery system serving customers in Tucson, Marana, Oro Valley and unincorporated Pima County, and

WHEREAS, Pima County provides the City of Tucson reclaimed water at no cost, valued at $86.2 million in 2019, to support regional water service delivery, and

WHEREAS, the City of Tucson adopted a Water Service Area Policy, which established a water service boundary for Tucson Water in 2010, which excluded unincorporated property owners from receiving Central Arizona Project water and

WHEREAS, the City of Tucson is considering additional fees for Tucson Water customers residing in unincorporated Pima County, and

WHEREAS, initiating water service initially as a regional water provider and then subsequently reducing water service boundaries and arbitrarily raising rates for unincorporated residents without cost-basis creates inequity to ratepayers lacking political representation through either the City of Tucson Mayor and Council or the Arizona Corporation Commission.

NOW THEREFORE, BE IT RESOLVED by the Board of Supervisors of Pima County, Arizona, that:
1. Pima County opposes differential water rate fees for Tucson Water customers residing in unincorporated Pima County, and
2. Recommends the City of Tucson Mayor and Council consider providing regional water service to all of Pima County not served by another water utility as originally envisioned.

Passed by the Board of Supervisors of Pima County, this ___day of __________, 2021.

____________________________
Chair, Pima County Board of Supervisors

ATTEST:

____________________________
Clerk of the Board

____________________________
Deputy County Attorney

APPROVED AS TO FORM: