

City of Tempe
Water Conservation and Efficiency
P.O. Box 5002
Tempe, AZ 85280



November 5, 2021

Natalie Mast, AMA Director - Management Plans
Arizona Department of Water Resources
1110 W. Washington St, Suite 310
Phoenix, Arizona, 85007

Re: 5th Management Plan for the Phoenix AMA, Non-Golf Turf Facilities Conservation Program

Ms. Mast:

The City of Tempe appreciates the Arizona Department of Water Resources' (ADWR) approach to developing the 5th Management Plan through a public stakeholder forum and applauds ADWR's efforts to reduce withdrawals of groundwater through an assessment and update of our conservation programs.

Tempe respectfully submits the following comments on the draft regulatory language for the 5th Management Plan Non-Golf Turf Facilities Conservation Program for the Phoenix Active Management Area (AMA).

Update to the Proposed Method of Calculating the Non-Golf Turf Facilities' Conservation Allotment

The October 21, 2021 update to the proposed method of calculating the non-golf turf facilities' conservation allotment divided facilities into two categories based on the facilities' percentage of water-intensive landscaped area. While we recognize the initiative to incentivize turf conversions into low-water-use landscapes by allowing a higher turf application rate for "low facilities," the updated turf application rate for "high facilities" is unrealistic and unsustainable because a 4.43 acre-feet (AF)/acre application rate is only appropriate for ornamental turf, not active turf areas.

Large, non-golf turf facilities capture municipal parks, which are public amenities that have seen an increase in use since the beginning of the COVID-19 pandemic. These parks need to be watered at an application rate of at least 4.75 AF/acre to maintain healthy turf areas that can withstand high traffic. Watering the turf areas at these parks at an application rate lower than 4.75 AF/acre creates safety hazards for the public. For example, turf areas in a public park with programmed recreation activities, like soccer, need to maintain a certain level of soil moisture—especially during the winter—to ensure proper dust control and air quality and to prevent more serious injuries if a child was to fall on the Phoenix AMA's already hard loam soil.

Tempe recommends that the "high facility" category be subdivided into "parks" and "non-parks" categories in order to allocate park facilities the 4.75 AF/acre application rate necessary for healthy turf areas and for preventing safety hazards.



Table 1: Tempe Proposed Application Rates and Categories for Non-Golf Turf Facilities in the Phoenix AMA

Facility Category	Category	Application Rate (AF/acre)
High - Parks (>30% water intensive landscape)	Turf	4.75
	Low Water Use Landscape Area	0.85
	Total Water Surface Area	6.2
High - Non-Parks (>30% water intensive landscape)	Turf	4.43
	Low Water Use Landscape Area	0.85
	Total Water Surface Area	6.2
Low (≤30% water intensive landscape)	Turf	4.75
	Low Water Use Landscape Area	1.08
	Total Water Surface Area	6.2

While Tempe recognizes that a non-golf turf facility can apply for a review of an allotment, over one-third of non-golf turf facilities in the Phoenix AMA are reported as parks. This review process could create a significant burden on ADWR staff to review. Additionally, since non-golf turf facilities are already required to report their subcategory, applying different application rates to different subcategories should not create a significant burden as the data necessary is already collected.

Definition of a Non-Golf Turf Facility

The definition of a large, non-golf turf facility has consistently stayed at ten (10) acres or more of water intensive landscaping. Throughout the Phoenix AMA, including in Tempe, there are a significant amount of landscape areas that are still large but fall below the ten (10) acre limit. Data shows that large water intensive landscapes over ten (10) acres tend to be more efficiently irrigated and managed than these mid-sized facilities. To further reduce groundwater withdrawals, it would be more effective to address mid-sized facilities with a higher water savings potential than to further tighten existing budgets for turf facilities over ten (10) acres.

Tempe recommends updating the definition of a non-golf turf facility to capture these mid-sized facilities. This could be done by reducing the ten (10) acres water intensive landscaping threshold. Alternatively, this could be done by adjusting the threshold of ten (10) acres or more of water intensive landscaping to instead capture any site with ten (10) acres or more of *total landscape area*. Budgets are a key conservation tool, and any large landscape can benefit from needing to abide by an allotment.

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Tempe recognizes that identifying these large, non-golf turf facilities is an administrative burden on ADWR staff who already have limited capacity. Some AMWUA municipalities, including Tempe, have the resources to identify these facilities and would be interested in collaborating with ADWR to assist. Additionally, with Maricopa County parcel data, sites with a total of ten (10) acres or more of total landscape area can be more easily identified than computing water-intensive landscaping.

Tempe appreciates the extensive effort ADWR has put forth to work with stakeholders through the 5th Management Plan process and trusts that the Department will ultimately move forward in a way that advances our shared goal of increasing water conservation and efficiency within Arizona. Tempe looks forward to continuing to partner with the Department throughout the remainder of the stakeholder process.

Please contact Caroline Cicerchi, Tempe's Commercial, Industrial and Institutional Water Conservation Coordinator at Caroline_Cicerchi@Tempe.gov with any questions you may have on the comments included herein.

Sincerely,

Caroline Cicerchi

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