



Public Notice Pursuant to A.R.S. § 38-431.02

**ARIZONA MUNICIPAL WATER USERS ASSOCIATION
BOARD OF DIRECTORS**

MEETING NOTICE AND AGENDA

Thursday, October 27, 2022 – 11:00 a.m.

***This meeting will be held as a Hybrid meeting.
Attendance in person is welcomed; Others may join via Zoom.***

Access this [Link](#) to join via Zoom. Meeting ID: 852 4289 7026

(Option to join by phone: 602-753-0140, same Meeting ID as above)

A. Call to Order

B. General Business—Items for Discussion and Possible Action

1. Approval of the Minutes from the September 22, 2022 Meeting
2. Schedule Next Meeting Date: **Wednesday, December 7, 2022, 1:00 p.m.**
3. Colorado River Conditions
4. 2023 AMWUA Legislative Agenda
5. AMWUA Outdoor Water Conservation Initiatives
6. Nominating Committee for AMWUA Board Officers for 2023

C. Executive Director's Report

D. Future Agenda Items

E. Adjournment

*The order of the agenda may be altered or changed by the AMWUA Board of Directors. Members of the AMWUA Board of Directors may attend in person or by internet conferencing.

More information about AMWUA public meetings is available online at www.amwua.org/what-we-do/public-meetings, or by request.

Arizona Municipal Water Users Association

BOARD OF DIRECTORS
MEETING MINUTES
September 22, 2022
HYBRID MEETING

VOTING MEMBERS PRESENT

Councilmember Bart Turner, Glendale, President
Councilmember Sheri Lauritano, Goodyear, Vice President
Councilmember Scott Anderson, Gilbert, Secretary-Treasurer
Councilmember Arlene Chin, Tempe
Councilmember René Lopez, Chandler
Councilmember Curtis Nielson, Avondale
Councilwoman Ann O'Brien, Phoenix
Mayor David Ortega, Scottsdale
Councilmember Brad Shafer, Peoria
Councilmember Kevin Thompson, Mesa

OTHERS PRESENT

Barry Aarons, Aarons Co.	Barbara Chappell, Tempe	Jacob Perez Laurent, AMWUA
Patrick J. Adams, AMWUA	Shane DePinto, SRP	Kathy Macdonald, Mesa
Erin Andres, Phoenix	Ray Diaz, Goodyear	Mike Milby, CliftonLarsonAllen
Alexis Apodaca, Chandler	Sam Draper, AMWUA	Diana Pina, AMWUA
Lauren Armour, Phoenix	Kathy Ferris, AMWUA	John Raeder, Peoria
Michelle Barclay, AMWUA	Brett Fleck, Peoria	Tammy Shreeve, Peoria
Gretchen Baumgardner, Scottsdale	Rachel von Gnechten, ADWR	Drew Swieczkowski, Glendale
Kirk Beaty, Avondale	Jake Golden, Phoenix	Warren Tenney, AMWUA
Anthony Beckham, SRP	Lisa Gray, CliftonLarsonAllen	Sheri Trapp, AMWUA
Rebecca Bernat, AWBA	Tonya Gray, Tempe	Theresa Ulmer, Ulmer Consulting
Craig Caggiano, Tempe	Lauren Hixson, Gilbert	Stefan Walston, Gilbert
Cynthia Campbell, Phoenix	Simone Kjolsrud, Chandler	Tammi Watson, CAP
		Adam Wiechman, ASU

A. Call to Order

Councilmember Turner called the meeting to order at 11:00 a.m.

B. General Business – Items for Discussion and Possible Action

1. Approval of the Minutes from the August 25, 2022 Meeting

Upon a motion made by Councilmember Thompson and a second from Councilmember Shafer, the AMWUA Board of Directors unanimously approved of the August 25, 2022 meeting minutes.

2. [Schedule Next Meeting Date: October 27, 2022, 11:00 a.m.](#)

3. [Colorado River Update](#)

Mr. Patrick Adams, Water Policy Advisor, recalled that on August 16th, the Bureau of Reclamation declared a Tier 2a Shortage on the Colorado River though no follow-up was given on the 2-4 million acre-feet mandate, nor any significant action to reduce demand. Elected officials and water managers in Nevada and Arizona have publicly called for Reclamation to impose water use reductions throughout the Basin. Mr. Adams reported that based on the modeling of the median and 10th percentile inflow forecasts from the August 24-Month study project, Lake Powell will continue declining. The scheduled releases from Lake Powell to Lake Mead is projected to be 7 million acre-feet, the minimum release under the River's operating procedures. Below the buffer elevation of 3,525 feet, Reclamation has expressed concern about the impact to dam operations and power generation from Glen Canyon Dam. Mr. Adams added that Glen Canyon Dam would no longer be able to move sufficient water to generate power at elevation 3,490 feet. From there, Reclamation notes water deliveries through the system face significant challenges once elevation falls below dam release outlets, with dead pool stopping all water deliveries at elevation 3,370 feet. With these elevations and infrastructure in mind, Mr. Adams reviewed two plausible future scenario models over the next 4 years for both Lake Powell and Lake Mead provided by the Bureau of Reclamation.

Councilwoman O'Brien asked about the 56% average runoff scenario in the projected volume modeling and should modeling include even lower average runoff scenarios. Mr. Adams responded that this figure accounts for the average runoff over a four-year period and serves as only one possible scenario for volume projection – noting the average runoff for 2021 was closer to 31%. Mr. Tenney added that these modeling averages were chosen by Reclamation to demonstrate the need for extraordinary conservation of 2-4 million acre-feet. AMWUA included in comments to Reclamation that modeling must be revisited to include all factors that influence runoff in the system.

Councilmember Shafer asked for clarification about the differences of the two future scenarios of 76% and 56% average runoff. Mr. Adams responded that these models are estimations of what could possibly happen under scenarios of average runoff similar to previous years, not a probability of the likelihood.

Mayor Ortega asked if this modeling was accounting for the gross yield of runoff across the Basin States or solely the Upper Basin runoffs. Mr. Adams responded that the modeling is inflows into Lake Powell, which is reliant on Upper Basin runoffs.

Councilmember Lopez asked whether Reclamation has adjusted or updated their modeling recently and if there is a success rate on their projections. Mr. Tenney responded that Reclamation has adjusted their modeling in recent years to analyze a 30-year hydrology period rather than a 100-year time frame. Mr. Adams added that these modeling scenarios are getting better at accounting for the future volumes under drier situations; however, previous instances of the 24-month study have shown overestimations of volumes.

Mr. Adams reported that Arizona's position in continued negotiations are as follows: all users in all sectors in all states must contribute to reducing water use; the CAP deliveries of Colorado River water

are critical for the regional and national economies; and the Department of the Interior must take action to protect the system where the Basin States haven't been able to.

Councilmember Shafer asked if there were any projections on when actions or announcements from the Bureau of Reclamation on where conservation negotiations might be. Mr. Adams responded that we are still waiting for updates.

Councilmember Anderson asked how much the federal government is influenced by interest groups regarding the severity of lake levels. Mr. Tenney responded that while he doesn't know specifics regarding lobbying groups, the federal government implored the States to reach an agreement for system conservation from its August announcement. Unfortunately, that did not take place and maneuvering the Law of the River to account for all users in the Basin will now prove a large challenge for the Department of the Interior.

Councilmember Thompson asked if the Interior and Reclamation are prioritizing either water and energy from Glen Canyon over one another. Mr. Tenney responded that the importance of both resources is in mind for the federal government, as both are reliant for Glen Canyon to properly function. Councilmember Turner asked for clarity that while there is a Tier 1 Shortage in place, Arizona is currently leaving volumes in Lake Mead corresponding to a Tier 3 Shortage. Mr. Tenney responded yes; however, it is agreed that the volumes described in the DCP Tier system are not enough to reduce the risk on the Colorado River. Mr. Tenney added there would most likely need to be conservation measures more drastic than a Tier 3 Shortage declaration from all Colorado River users to produce the 2-4 million acre-feet contribution detailed by Reclamation.

Councilwoman O'Brien asked what cumulative contributions to stabilize the River system have been made by the Upper Basin States. Mr. Adams responded that the Upper Basin States have a demand management program and use less Colorado River water, so their strategies differ from the Lower Basin States in terms of system conservation. The held position in the Lower Basin is that all users within the Basin – Upper and Lower – must increase their contributions to stabilize the river system. Councilmember Lopez asked if the Upper Basin uses less water or if they have lower allotments to the system, to which Mr. Adams responded the latter. Councilmember Lopez asked if any actions have been made to lower their usage over the last few years, like Arizona has demonstrated. Mr. Tenney responded that while the Lower Basin uses the entirety of its Colorado River allotment, the Upper Basin has yet to put their allotments to full use. In this way, the Upper Basin claims they are supporting the health of the system and may not need to take extraordinary action similar to the Lower Basin.

Mr. Adams reported that both the Southern Nevada Water Authority and Arizona Department of Water Resources have sent recommendations of possible actions for the Interior to implement. These recommendations focus on reducing water use across all sectors by all users. Mr. Adams displayed scenario tools that illustrate distributions of CAP delivery supplies to AMWUA members under significant water cuts. Mr. Adams emphasized that impacts to CAP supplies will affect all subcontractors in the Valley.

Councilmember Turner encouraged members to understand their own water portfolios to plan and lead conversations during different, plausible levels of reduction. Councilmember Shafer shared about the impact of an example reduction for the City of Peoria.

Mr. Adams stated that all other water supplies need protection through the future, and municipal users must find collaborative solutions, such as exchanges or interconnects, to address CAP impacts. AMWUA will continue to elevate the municipal perspective, advocating for immediate plan of action and participating in long-term solutions through Reconsultation. In addition, AMWUA will coordinate and evolve messaging about our preparation and response for less Colorado River water.

Mr. Tenney noted that since the AMWUA Board of Directors communicates with many leaders across the State, AMWUA has produced talking points regarding the Colorado River for each Board member to educate fellow councilmembers and elected officials. Finally, he implored councilmembers to rely on and include their water managers in important decisions within their respective communities.

C. Executive Director's Report

Mr. Tenney reported that he was a panel speaker at the City of Scottsdale's Mayor and Council Breakfast, where he was able to engage in positive discussions surrounding water to over 200 attendees.

Mr. Tenney reported that to prepare for the 2023 Legislative Session, AMWUA is meeting with its legislative consultant on educating the influx of new legislators. There are plans for another Vetting Forum 4 Water, though it will be after the election in November.

Mr. Tenney noted that CAP will be holding a roundtable discussion surrounding conservation. AMWUA maintains a position that CAP should support and promote existing conservation programs already found in municipal conservation programs rather than creating an entirely new initiative. In addition, CAP will be holding an election for the 5 vacant positions in Maricopa County. AMWUA, the Kyl Center for Water Policy, and the Arizona Hydrological Society are creating an informational voting guide on various water positions from the 14 candidates.

Mr. Tenney reported that the new Water Infrastructure and Finance Authority becomes effective on September 24th, with the appointment of the new Board of Directors taking place over the next week.

Finally, Mr. Tenney announced that tomorrow is Water Hero Day, recognizing the over 2,500 water professionals working in the Valley to supply water for residents and businesses year-round.

D. Future Agenda Items

Councilmember Lopez asked if there will be an educational open-house at the State Capitol to engage further with legislators. Mr. Tenney reported that there are tentative plans for this in January after the session begins.

E. Adjournment

Councilmember Turner adjourned the meeting at 12:25 p.m.

BOARD OF DIRECTORS
INFORMATION SUMMARY
October 27, 2022

Colorado River Conditions

ANNUAL PLAN REFERENCE

Colorado River Management & Shortage Preparation

Assist, monitor and coordinate on the impacts of shortage declarations on the Colorado River along with the Reconsultation of the 2007 Colorado River Interim Guidelines to ensure our members' interests are forefront.

- Ongoing Coordination – Pursue opportunities to assist and synchronize continuing preparation efforts such as identifying ways to strengthen members' drought (shortage) preparedness plans.
- Risks – Analyze long-term risks of shortages to our members

Strategic Plan: Facilitate our Strength in Numbers, Collaborate and Advocate for Solutions, Safeguard Water Supplies, Prepare for Impacts of Drought & Shortage, Minimize Financial Impacts

SUMMARY

AMWUA staff will give an update regarding current Colorado River conditions and the Tier 2 Shortage declaration for 2023. To date, Reclamation has not specified how extraordinary additional reductions will be implemented in the short term. However, there have been indications that Reclamation is considering how to factor in evaporation in the Lower Basin and evaluating the term “beneficial use.”

Reclamation did announce the Lower Colorado River Basin System Conservation and Efficiency Program, which will use the \$4 billion from the Inflation Reduction Act to fund projects that are selected to mitigate drought, protect important natural resources, and ensure a reliable source of water and power for those who live in communities across the West.

RECOMMENDATION

The AMWUA Board of Directors is requested to ask questions and discuss the Colorado River shortage.

BOARD OF DIRECTORS
INFORMATION SUMMARY
October 27, 2022

2023 AMWUA Legislative Agenda

ANNUAL PLAN REFERENCE

Legislation

Effectively advocate with one voice at the Legislature.

- Monitor, analyze and clarify state and federal legislation of interest to our members.
- Engage with legislators to inform them about the issues important to AMWUA including identifying and working with legislators to champion water issues.

Strategic Plan: Collaborate and Advocate for Solutions, Safeguard Water Supplies, Reinforce Groundwater Management, Prepare for Impacts of Drought & Shortage, Pursue Post-2025 Water Policy

SUMMARY

The 2023 Legislative Agenda outlines the principles and priorities that will guide AMWUA's actions throughout the session. These principles and priorities are consistent with the AMWUA Board's existing "Legislative Policies & Procedures" and the approved Annual and Strategic Plans. The 2023 Legislative Agenda does not preclude AMWUA from taking a broader action on legislation that may arise per AMWUA's 2015 legislative policies and procedures.

Adoption of the 2023 Legislative Agenda will provide a useful tool for each of the AMWUA members to incorporate into their individual legislative agendas and will increase collaboration and coordination between AMWUA staff and each member's InterGovs.

Following is AMWUA's proposed state Legislative Agenda for 2023. AMWUA staff reviewed this proposed legislative agenda with the Management Board at the October 12, 2022 meeting.

RECOMMENDATION

At the October 12th meeting, the AMWUA Management Board recommended to the AMWUA Board of Directors adoption of the proposed Legislative Agenda for the 2023 legislative session.

Suggested Motion: I move that the AMWUA Board of Directors approve and adopt the proposed 2023 Legislative Agenda.

2023 AMWUA Legislative Agenda

Arizona State Agencies

Promote the efficient and effective performance of statutory responsibilities by the Arizona Department of Water Resources, Arizona Department of Environmental Quality, and the Water Infrastructure Finance Authority of Arizona.

Support legislation that encourages investment in water infrastructure, including statutory changes that promote the utilization of federal funds from the Water Infrastructure Financing Authority by local governments.

Arizona Water Management

Uphold and enhance the Groundwater Management Code, the 100-Year Assured Water Supply Program and the Phoenix AMA's Safe-yield Management Goal – all which protect our members' ability to serve their communities with assured, safe, and sustainable water supplies now and for future generations.

Colorado River Water

Support efforts to stabilize the Colorado River system, including long-term, durable water use reductions, while continuing to protect the existing priorities, rights, and contracts of our members' Colorado River water supplies.

Support measures that provide appropriate regulatory flexibility necessary for the AMWUA members to adapt to near-term Colorado River shortages and meet the water demands of their communities.

Water Efficiency and Conservation

Support legislation that promotes and invests in practical, effective water efficiency and conservation, particularly measures targeting reduction of outdoor water usage.

Water Quality

Support legislative efforts to protect and improve the quality of AMWUA members' water supplies, including proposals to improve watershed management. Support a sustainable funding mechanism for the Arizona Water Quality Assurance Revolving Fund (WQARF). Support efforts that advance direct potable reuse of recycled water supplies.

BOARD OF DIRECTORS
INFORMATION SUMMARY
October 27, 2022

AMWUA Outdoor Water Conservation Initiatives

ANNUAL PLAN REFERENCE

Demand Management & Efficiency

Continue to excel as a leader in water conservation by assisting our members in strategizing demand management and in raising awareness about ongoing conservation efforts in order to enhance water resource supply sustainability.

- Increase outdoor water efficiency including efforts to research and develop outdoor water efficiency standards.
- Further quantify savings from water conservation efforts.
- Engage in efforts to pursue demand management best practices and policies of the State and of our members and through commercial, industrial, and institutional efficiencies.
- Engage in regional, statewide, and national demand management efforts and elevate our members' programs including evaluating and improving the Smartscape Program.
- Sustain AMWUA's resource materials including publications and websites that are utilized by our members and the public including updating *Landscape Plants for the Arizona Desert*.
- Expand promotion and visibility of existing and new AMWUA and member materials and programs along with the overall messaging about our water conservation efforts.

Strategic Plan: Facilitate our Strength in Numbers, Educate – Excel as an Expert and Resource, Collaborate and Advocate for Solutions, Safeguard Water Supplies, Strengthen Groundwater Management, Prepare for Impacts of Drought & Shortage, Pursue Post-2025 Water Policy, Minimize Financial Impact, Interconnect Disciplines

SUMMARY

AMWUA's Strategic and Annual Plans identify short and long-term goals of demonstrating leadership in water conservation efforts and assisting the member cities in achieving success in their respective programs. Last year, AMWUA staff collaborated with the members to develop a suite of outdoor water conservation ordinance concepts that could spur reductions in outdoor water use. On December 2, 2021, the AMWUA Board endorsed the six concepts and directed AMWUA staff to forward them to each municipality for consideration.

At the October 27, 2022 AMWUA Board of Directors meeting, staff will provide a refresher of the outdoor water conservation ordinance concepts approved last year in an effort to encourage the implementation of these outdoor water conservation initiatives so we can continue to demonstrate leadership from Arizona's municipal sector.

RECOMMENDATION

The AMWUA Board of Directors is requested to discuss and provide feedback to AMWUA staff on implementing an outdoor water conservation related initiative.



Water Conservation Ordinance Concept: WaterSense® Smart Irrigation Controller

December 2, 2021

CONCEPT

Require the installation and maintenance of U.S. Environmental Protection Agency (EPA) WaterSense®, or equivalent, labeled weather-based smart irrigation controllers in permanent irrigation systems for new commercial, industrial, and institutional developments, and common areas of residential developments.

This requirement can be incorporated into existing municipal plan review processes.

Individual municipalities may decide to expand this requirement to also target new model homes, as well as existing commercial, industrial, and institutional developments, and common areas of residential developments at the point of resale, and/or during renovations exceeding a predetermined threshold by the municipality.

WATER SAVINGS

- The Town of Gilbert's Water Efficient Technology Incentive (WETI) Program ran a Homeowners Association (HOA) Smart Controller Pilot Program. Across the Pilot Program's 19 sites with one year pre-installation consumption data and one-year post-installation consumption data, Gilbert found a savings of 4,169,000 gallons of water or 18%.ⁱ
- Tests by the Irrigation Association and the International Center for Water Technology at California State University in Fresno have shown smart irrigation controllers save up to 20% more water than traditional irrigation controllers.ⁱⁱ
- Smart irrigation controllers are an established water conservation technology. Seven out of ten AMWUA members currently offer rebates, incentives, or programs for smart irrigation controllers for residential and non-residential customers.

COMPARABLE ORDINANCES AND EXAMPLES

- Ordinances requiring an EPA WaterSense® Controller are an established water conservation measure. On August 3, 2021, the Town of Gilbert adopted ordinances requiring EPA WaterSense® controllers for new single-family and multi-family development common areas, model homes, and non-residential developments.ⁱⁱⁱ

- Municipalities in California^{iv} and Texas^v have also established ordinances with smart irrigation controller requirements. Further, the 2021 International Green Construction Code^{vi} prescribes qualifying EPA WaterSense® weather-based irrigation controllers be installed where any irrigation system for a project site uses an automatic controller.

ⁱ “Water Efficient Technology Program: A Targeted Approach,” presented by Town of Gilbert, Arizona at WaterSmart Innovations 2019, <https://ceregportal.com/wsi/documents/sessions/2019/T-1920.pdf>

ⁱⁱ “Smart Irrigation Controllers,” Salt River Project (SRP), <https://www.srpnet.com/water/smartirrigation.aspx>.

ⁱⁱⁱ Town of Gilbert, Arizona, Ordinance No. 2807,

https://library.municode.com/az/gilbert/ordinances/code_of_ordinances?nodeId=1100347

^{iv} Santa Cruz, California, Municipal Code Section 16.16.070(f)

<https://www.codepublishing.com/CA/SantaCruz/html/SantaCruz16/SantaCruz1616.html>

^v Little Elm, Texas, Municipal Code Sec. 102-319.,

https://library.municode.com/tx/little_elm/codes/code_of_ordinances?nodeId=PTIICOOR_CH102UT_ARTVIWACO_S102-319ENWACOST

^{vi} 2021 International Green Construction Code, Section 601.3.1.2.2,

<https://codes.iccsafe.org/content/IGCC2021P1/chapter-6-water-use-efficiency>



Water Conservation Ordinance Concept: Non-functional Grass Limitations

December 2, 2021

CONCEPT

Prohibit the installation of non-functional turfgrass areas in new commercial, industrial, and institutional developments, and common areas of residential developments.

Non-functional turfgrass shall be defined as:

- Grass areas with any single dimension of eight (8) feet or less.
- Grass areas exceeding a 4:1, or twenty-five percent (25%), slope.
- Grass areas that are not accessible by paved pathways and/or are restricted by physical barriers that prohibit accessibility.
- Grass areas installed closer than ten (10) feet to a street and/or in front entryways to residential neighborhoods or subdivisions where other recreational amenities do not exist.
- Grass areas that are not utilized for active or programmed recreational purposes and/or for drainage conveyances, storm basins, or erosion control.

This requirement can be incorporated into existing municipal landscape plan review processes.

WATER SAVINGS

- The average conversion to a xeriscape can save 50% or more on outdoor water use.ⁱ Limiting grass from the point of installation rather than retrofitting landscapes in the future saves water and money for customers from the beginning.
- These non-functional grass areas should be prohibited because due to their size, they cannot be irrigated properly without creating run-off and water waste, and they cannot be utilized as recreation areas. Additionally, overspray is common with narrow strips wasting water with off target irrigation.

COMPARABLE ORDINANCES AND EXAMPLES

- Nevada Assembly Bill No. 356, prohibits (with exceptions) Colorado River water distributed by Southern Nevada Water Authority (SNWA) to be used to irrigate non-functional turf on any property that is not zoned exclusively for Single-Family Residential (SFR) on and after January 1, 2027 and requires the SNWA Board of Directors to define non-functional and functional turf and develop a plan to identify and facilitate the

removal of non-functional turf within SNWA's service area on non-SFR property before December 31, 2026.ⁱⁱ

- The City of North Las Vegas, Nevada has clear restrictions for installing new turf that limit the size, location and slope of the area as well as requiring water-efficient turf species be utilized.ⁱⁱⁱ
- In Arizona, landscaping in irrigated public medians and rights-of-way has been restricted to low-water-use plants identified in Regulatory Plant Lists specific to each Active Management Area (AMA), effectively banning the installation of grass in public medians and rights-of-ways since the 1980s.^{iv} These Regulatory Plant Lists have largely been incorporated into AMWUA municipalities' ordinances and design standards to provide guidance on appropriate, low-water-use plant materials.
- The 2021 International Green Construction Code prohibits the installation of irrigation sprinklers for prescribed, narrow landscape dimensions.^v
- The Seven Principles of Xeriscaping, which AMWUA and its members have been promoting for over 20 years, specifically reference the use of appropriate turf areas.^{vi}

ⁱ"Good Reasons to Take Out Your Grass," AMWUA, https://www.amwua.org/resource_documents/turf_removal-english.pdf

ⁱⁱState of Nevada, Assembly Bill No. 356, https://www.leg.state.nv.us/Session/81st2021/Bills/AB/AB356_R1.pdf

ⁱⁱⁱCity of North Las Vegas, Nevada, Municipal Code Section 13.08.060, https://library.municode.com/nv/north_las_vegas/codes/code_of_ordinances?nodeId=TIT13PUSE_CH13.08WACO

^{iv}"First Management Plan for the Phoenix Active Management Area," Arizona Department of Water Resources, <http://infoshare.azwater.gov/docushare/dsweb/Get/Document-10006/1MP%201980-1990%20Dec.1984.pdf>

^v2021 International Green Construction Code, Section 601.3.1.2.1.(f), <https://codes.iccsafe.org/content/IGCC2021P1/chapter-6-water-use-efficiency>

^{vi}"Landscaping with Style," AMWUA, <https://www.amwua.org/landscaping-with-style>



Water Conservation Ordinance Concept: Conservation Requirements on New Water Features

December 2, 2021

CONCEPT

Prescribe conservation requirements on new ornamental water features for commercial, institutional, and industrial users, and for common areas of residential developments.

Individual municipalities may decide to adopt any or all the following conservation requirements. Further, individual municipalities may decide to exempt certain water features and customers based on their community. This ordinance concept could also be expanded to target existing ornamental water features at commercial, industrial, and institutional developments, and common areas of residential developments at the point of resale, and/or during renovations exceeding a predetermined threshold by the municipality.

Potential conservation requirements:

- The spray from a water feature shall be limited to six (6) feet in height from the base of the water column.
- The water feature's location must:
 - Allow for significant environmental enhancement to on-site users, by cooling the surrounding area and/or by masking objectionable noises. (Allowable examples: courtyards, restaurant seating areas, and oasis areas.)
 - Not be visible from the street and be outside of city rights-of-way.
- The water feature must be:
 - Designed and installed with hardware and materials that will minimize leakage throughout the life of the water feature.
 - Designed and installed with catch basins that will maximize the amount of water recycled and minimize make up water.
 - Designed and installed with a reduced pressure principle backflow prevention assembly as per the current standard detail adopted by the individual municipality.
 - Designed to reuse filtered backwash in a manner beneficial to surrounding plant material and landscaped areas.
 - Equipped with wind shut-off valves to reduce over-spray.
 - Equipped with a recirculating pump.
 - Installed with a separate billing meter from the provider, if using more than five hundred (500) gallons of water per day.
 - Equipped with an automatic shut-off timer.
 - Regularly maintained and checked for leaks.

- Water features shall only be operated during normal business hours.
- The total surface area of the water feature(s) shall not exceed 1% of the net site area of the development.

This requirement can be incorporated into existing municipal plan review processes.

WATER SAVINGS

- The majority of AMWUA members have municipal codes that contain some limitation on water features to increase conservation. This is an opportunity to enhance all AMWUA members' ordinances while creating consistency across the service areas which is helpful in communication with customers, especially businesses that have locations in multiple cities.
- The Arizona Department of Water Resources' (ADWR) Non-Per Capita Conservation Program's Appendix of Best Management Practices has specified ordinances limiting water features or requiring conservation measures for water features in the Third Management Planⁱ, Fourth Management Planⁱⁱ, and draft Fifth Management Planⁱⁱⁱ.

COMPARABLE ORDINANCES AND EXAMPLES

- The City of Scottsdale, Arizona^{iv} and the Town of Gilbert, Arizona^v have comprehensive and conservation-oriented water feature ordinances.
- The City of Las Vegas, Nevada has an ordinance prohibiting fountains and water features on properties serviced by Southern Nevada Water Authority and lists exceptions to the exclusion.^{vi}
- The Town of Payson, Arizona prohibits new water features larger than five hundred (500) gallons capacity.^{vii}
- The City of Tucson, Arizona restricts the total surface area of water features to a percentage of the net site area.^{viii}

ⁱ "Third Management Plan for the Phoenix Active Management Area, Second Order of Modifications," ADWR, <http://infoshare.azwater.gov/docushare/dsweb/Get/Document-10040/MOD%202000-2010.May%202008.pdf>

ⁱⁱ "Fourth Management Plan for the Phoenix Active Management Area," ADWR, https://new.azwater.gov/sites/default/files/media/FULL%20FINAL%20PHX%204MP_1.pdf

ⁱⁱⁱ "Fifth Management Plan for the Phoenix Active Management Area, Draft Appendix 5C," ADWR, https://new.azwater.gov/sites/default/files/media/2021-04-02_DRAFT5MP_Municipal_Appendix5C.pdf

^{iv}City of Scottsdale, Arizona, Municipal Code Sec. 49-242.,
https://library.municode.com/az/scottsdale/codes/code_of_ordinances?nodeId=VOLII_CH49WASESEDI_ARTVIIWA_CO_DIV1WACO_S49-242LIWAFECOUSNEINUSCOARREDE

^vTown of Gilbert, Arizona, Municipal Code Sec. 66-355.,
https://library.municode.com/az/gilbert/codes/code_of_ordinances?nodeId=CO_CH66UTOP_ARTVIIIWACO_DIV1_GE_S66-355LINEWAFE

^{vi}City of Las Vegas, Nevada, Municipal Code Section 14.11.190,
https://library.municode.com/nv/las_vegas/codes/code_of_ordinances?nodeId=TIT14PUSE_CH14.11DRPL_14.11.190PONTAWAUTROXC

^{vii}Town of Payson, Arizona, Municipal Code Section §50.63,
https://codelibrary.amlegal.com/codes/payson/latest/payson_az/0-0-0-31097

^{viii}City of Tucson, Arizona, Municipal Code Section 7.6.6.(D)(1)(c),
https://codelibrary.amlegal.com/codes/tucson/latest/tucson_az_udc/0-0-0-6086



Water Conservation Ordinance Concept: Pressure-Regulating Sprinkler Heads & Pressure-Compensating Drip Emitters

December 2, 2021

CONCEPT

Require the installation and maintenance of the following irrigation system components in permanent irrigation systems for new commercial, industrial, and institutional developments, and common areas of residential developments:

- Sprinkler heads must contain an integral pressure regulator
- Drip irrigation emitters must contain built-in pressure compensation

This requirement can be incorporated into existing municipal plan review processes.

WATER SAVINGS

- The Irrigation Association includes pressure-compensated emission devices as a best management practice to manage landscape water resources.ⁱ
- Pressure-regulating sprinkler heads and pressure-compensating drip irrigation emitters aid in proper landscape watering by creating more even water distribution which lends to a healthier landscape while reducing water waste caused by high-pressure misting.ⁱⁱ

COMPARABLE ORDINANCES AND EXAMPLES

- All AMWUA members have ordinances in place that prohibit the waste of water; many include the overspray or run-off water from permanent irrigation systems as a specified violation. Many AMWUA members also have ordinances and guidelines in place that require efficient irrigation systems. Requiring the installation and maintenance of sprinkler heads with an integral pressure regulator and drip irrigation emitters with built-in pressure compensation aligns with existing policies as they reduce water waste and increase irrigation efficiency.
- Several states have taken the approach to enforce pressure-regulating sprinkler heads at the point of sale rather than at the point of installation.
 - Colorado House Bill 19-1231 includes a provision that, “applies to spray sprinkler bodies sold as new in Colorado, stating that they ‘must include an integral

pressure regulator and meet EPA WaterSense® specifications—unless they are specifically excluded from the scope of WaterSense specification.”ⁱⁱⁱ

- Several other states have laws prohibiting spray sprinkler bodies from the point of sale if they do not meet WaterSense®, or equivalent program, standards. For example, the California State law prescribes, “spray sprinkler bodies sold or offered for sale in California are required to use the WaterSense test procedure (Version 1.0, September 21, 2017) and must meet state standards (California Code of Regulations, Title 20, section 1605.3(x)(1)(A)).”^{iv}

ⁱ “Landscape Irrigation Best Management Practices,” Irrigation Association, May 2014, <https://www.irrigation.org/IA/FileUploads/IA/Advocacy/Landscape-Irrigation-BMP.pdf>

ⁱⁱ “WaterSense® Specification for Spray Sprinkler Bodies Supporting Statement,” U.S. EPA WaterSense®, September 21, 2017, <https://www.epa.gov/sites/default/files/2017-09/documents/ws-products-support-statement-ssb.pdf>

ⁱⁱⁱ “New State Law Requires Water-Efficient Sprinklers,” Southwest Metropolitan Water and Sanitation District, July 23, 2019, <https://swmetrowater.org/new-state-law-requires-water-efficient-sprinklers/>

^{iv} “Spray Sprinkler Bodies Frequently Asked Questions,” California Energy Commission, <https://www.energy.ca.gov/programs-and-topics/programs/appliance-efficiency-program-outreach-and-education/spray-sprinkler>

Water Conservation Ordinance Concept: Separate Landscape Metering

December 2, 2021

CONCEPT

Require the installation of separate landscape/irrigation water meters in new commercial, industrial, and institutional developments, as well as common areas of new residential developments with irrigated landscape areas greater than 10,000 square feet.

This requirement can be incorporated into existing municipal plan review processes.

WATER SAVINGS

- Separate landscape/water irrigation meters provide accurate measurements of outdoor water use. These measurements allow for leaks to be more easily identified and for more targeted conservation strategies to be implemented to maximize water savings.
- Separate landscape/water irrigation meters empower customers with information about their outdoor water use so they can make behavioral changes. This information also empowers utilities to manage outdoor water use more effectively by greatly assisting in administering targeted conservation programs and other demand management strategies.
- Example: The Town of Gilbert administers a Landscape Water Budgeting Program for Homeowners Associations (HOAs), and commercial and multifamily customers that utilizes actual outdoor water use data and site-specific landscape information to create customized landscape water budgets for each participating customer. According to the Town, “in 2019, 290 participants partnered with Gilbert Water Conservation and saved over 188 million gallons of water. This equates to \$381,000 in avoided excess water costs for these sites.”ⁱ

COMPARABLE ORDINANCES AND EXAMPLES

- The City of Scottsdale, Arizona requires a separate meter for, “the watering of any landscaped area or areas of a development which, in total, are over five (5) acres in size...”ⁱⁱ
- The City of Phoenix, Arizona requires a separate meter for, “landscape watering of all landscape areas greater than 10,000 square feet.”ⁱⁱⁱ

- AMWUA members that utilize reclaimed water in their portfolios have ordinances that require separate metering for reclaimed water which is utilized for landscape purposes. For example, the Town of Gilbert requires a separate meter for reclaimed water which is utilized for landscape purposes. “All premises using reclaimed water obtained from the town must be equipped with an adequate meter installed and paid for by the consumer. A meter shall be installed in a location that will be of easy access and have an accuracy of plus or minus five percent. All meters shall register actual flow and totalize all flows.”^{iv}
- The City of Rio Vista, California requires landscape separate meters without landscapeable area parameters. “In all new commercial development subject to the provisions of this chapter, a separate water meter shall be required for the purpose of landscaping. A separate water meter shall also be required for common areas associated with new residential condominiums and planned unit developments.”^v

ⁱ “Landscape Water Budgeting Program,” Town of Gilbert, Arizona, <https://www.gilbertaz.gov/departments/public-works/water-conservation/commercial/homeowner-associations>

ⁱⁱ City of Scottsdale, Arizona, Municipal Code Sec. 49-32., https://library.municode.com/az/scottsdale/codes/code_of_ordinances?nodeId=VOLII_CH49WASESEDI_ARTIIMU_WASY_DIV1GE_S49-32SEME

ⁱⁱⁱ City of Phoenix, Arizona, Municipal Code Sec. 37-53., <https://phoenix.municipal.codes/CC/37-53>

^{iv} Town of Gilbert, Arizona, Municipal Code Sec. 66-144., https://library.municode.com/az/gilbert/codes/code_of_ordinances?nodeId=CO_CH66UTOP_ARTVREWASE_S66-144MEINRETE

^v City of Rio Vista, California, Ordinance No. 643, Sec. 17.68.090., <https://verderiver.org/wp-content/uploads/2017/06/rio-vista-water-conservation-landscape-ordinance.pdf>



Water Conservation Ordinance Concept: Alignment of Water Waste Definitions

December 2, 2021

CONCEPT

Align and enhance water waste definitions across AMWUA membership.

Water waste specifically includes but is not limited to the following:

- Water not put to beneficial use;
- Any use of water in excess of that reasonably necessary to accomplish the intended task;
- Willfully or negligently permitting or causing the escape or flow of water, such as into the public right of way in such quantity as to cause flooding, to impede vehicular or pedestrian traffic, to create a hazardous condition for such traffic, or to cause damage to the public streets or alleys of the Municipality through the failure or neglect to operate or maintain properly any water facility or device, including, but not limited to, swimming pools, architectural pools, spas, water features, sprinklers, hoses, pipes, ditches, standpipes, berms, valves and gates.

WATER SAVINGS

- All AMWUA members have municipal codes that prohibit water waste. This is an opportunity to strengthen all AMWUA members' ordinances while creating consistency across the service areas which is helpful in communication with customers, especially businesses that have locations in multiple cities. Further, water waste enforcement is included in Drought Preparedness Plans. More consistent definitions could assist with Drought Preparedness Plan implementation.
- AMWUA members utilize water waste occurrences as an outreach opportunity that has additional indirect water savings beyond resolving the water waste. For example, if a property manager contacts a municipality about water waste, staff will inform them of other programs available to help save water that the property manager may decide to leverage across all their properties.
- The Arizona Department of Water Resources' (ADWR) Non-Per Capita Conservation Program's Appendix of Best Management Practices has specified water waste prohibition ordinances for residential or non-residential properties in the Third Management Planⁱ, Fourth Management Planⁱⁱ, and draft Fifth Management Planⁱⁱⁱ.

COMPARABLE ORDINANCES AND EXAMPLES

- All AMWUA members have municipal codes that prohibit water waste.
- ADWR published a document, “Developing Ordinances to Prohibit Outdoor Water Waste,” which provides further guidance and validation.^{iv}

ⁱ “Third Management Plan for the Phoenix Active Management Area, Second Order of Modifications,” ADWR, <http://infoshare.azwater.gov/docushare/dsweb/Get/Document-10040/MOD%202000-2010.May%202008.pdf>

ⁱⁱ “Fourth Management Plan for the Phoenix Active Management Area,” ADWR, https://new.azwater.gov/sites/default/files/media/FULL%20FINAL%20PHX%204MP_1.pdf

ⁱⁱⁱ “Fifth Management Plan for the Phoenix Active Management Area, Draft Appendix 5C,” ADWR, https://new.azwater.gov/sites/default/files/media/2021-04-02_DRAFT5MP_Municipal_Appendix5C.pdf

^{iv} “Developing Ordinances to Prohibit Outdoor Water Waste,” ADWR, https://new.azwater.gov/sites/default/files/media/Waste_Ordinance_2018_1.pdf

BOARD OF DIRECTORS
INFORMATION SUMMARY
October 27, 2022

Nominating Committee for AMWUA Board Officers for 2023

STRATEGIC PLAN REFERENCE

Operational Principles – Facilitate our Strength in Numbers

SUMMARY

The AMWUA Board of Directors is to elect a President, Vice President, and Secretary-Treasurer by its December meeting. The officers serve from January 1, 2023 through December 31, 2023. To meet this requirement, the current President of the Board is to appoint a three-member nominating committee to recommend a slate of officers.

According to the AMWUA By-laws, the officers are to each have served on the current Board of Directors at least from January 1, 2022 through December 31, 2022. Each officer must be able to serve for a one year period. Each officer also may serve a maximum of two consecutive years in the same position. A member of the Board of Directors may serve a maximum of six consecutive years as an officer.

The Board members who meet the requirements to serve as President, Vice-President and Secretary-Treasurer are as follows: Councilmember Scott Anderson of Gilbert, Councilmember Sheri Lauritano of Goodyear, Councilmember Curtis Nielson of Avondale, Councilwoman Ann O'Brien of Phoenix, Mayor David Ortega of Scottsdale, and Councilmember Bart Turner of Glendale.

Any Board member who is interested in serving as an officer and meets the above-noted requirements should submit a letter by November 11th to the Executive Director. All letters of interest will be forwarded to the appointed nominating committee.

RECOMMENDATION

The President of the AMWUA Board of Directors is requested to appoint three members of the Board as a nominating committee to recommend a slate of officers for President, Vice President and Secretary-Treasurer for calendar year 2023.