## **CUWA Policy Principles**

## Water Use Efficiency, Conservation, and Declining System Flows

November 27, 2017

Water use efficiency (WUE) is a fundamental component of CUWA's mission and an important part of our agencies' long-term water supply reliability efforts for sustainably meeting future water demands. Within the urban water cycle (i.e., the interconnected infrastructure tying together water, wastewater, and/or stormwater), declining flows can potentially impact water, wastewater, and recycled water systems. Consideration must be given to the integrated nature of systems when developing policy associated with long-term WUE and indoor water use.

The following points reflect CUWA's views on long-term WUE, water conservation, and adapting to declining system flows.

- 1. CUWA is committed to building on gains in public understanding experienced during drought to establish a cultural shift toward water use efficiency as a California way of life. Our member agencies are helping to make efficient water use a California way of life and providing reliable, resilient water supplies now and in the future. Our agencies' WUE programs have focused on creating lasting changes and developing effective tools that we continue to apply.
  - Heightened reporting efforts and performance measures improve awareness and visibility—increasing the media's and the public's consciousness of water use and leading customers to largely embrace and implement conservation and WUE measures. Our agencies are committed to continuing WUE, regardless of state regulations.
- 2. Wisely managing demands is foundational to ensuring reliable water supplies in years to come. California water agencies continue to prioritize wise water use through both short-term conservation efforts (i.e., in response to drought or emergency) and long-term efficiencies for lasting, sustainable effects. While some use the term "conservation" to describe both short-term and long-term strategies, CUWA distinguishes between conservation as an emergency response to drought and WUE as a long-term strategy for lasting demand reductions. Observations from utilities impacted by emergency conservation measures can inform long term WUE policies. Over time, implementation of permanent efficiencies will reduce capacity for conservation and emergency reductions in times of drought.
- 3. Actions appropriate for sustainable long-term WUE differ significantly from those for short-term, emergency water use reductions. Actions taken to address water shortage emergencies are intended to achieve short-term water use reductions through behavior change and sacrifice by water customers. Though some behavioral changes precipitated by emergency conditions may lead to positive lasting changes (e.g., California friendly landscapes), other extreme measures (e.g., insufficient tree watering) carry adverse impacts and are not sustainable for extended periods. When properly designed and implemented based on a holistic analysis of the urban water cycle, long-term WUE programs can result in sustainable water demand offsets that support the economy, environment, and communities.

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- 4. The entire interconnected urban water cycle as well as public health and safety must be considered in long-term WUE policies. The existing urban water cycle is challenged by ancillary impacts of declining flows on water, wastewater, and recycled water. Such low flows can bring complications, and adaptations may not be straightforward or without significant costs. Some of the impacts include:
  - Operational challenges in water distribution systems and changes in water quality. And since water systems are typically designed to carry fire flows, they cannot be downsized without adverse effects.
  - Increased odor issues, solids deposition, O&M needs and corrosion in wastewater conveyance systems.
  - Changes in influent and effluent quality for wastewater treatment systems.
  - Decreased recycled water production along with changes in influent and effluent recycled water quality.

Policies addressing long-term WUE must account for cost required to adapt to new flow expectations. The State should provide flexibility for utilities to adjust or offer variances to account for local impacts and investments in water supply reliability measures including increased use of recycled and purified water as recommended by the California Water Action Plan.

- 5. Greater flexibility, enabled by more diverse supply and storage options, will better position urban utilities to address future uncertainties. While WUE is an important element of water management programs, it is not in itself sufficient to manage all future water demands. The California Water Action Plan acknowledges the need for more comprehensive water management and supports "making regions more self-reliant by reducing water demand and by developing new or underused water resources locally" and expanding storage "to deal with the effects of drought and climate change on water supplies for both human and ecosystem needs." Acknowledging that declining flows have the potential to reduce the production of local, drought-resistant water supplies through water reuse, California policy on long-term WUE should prioritize outdoor water use restrictions, which will have a lower impact on interconnected water systems, to achieve statewide demand management goals.
- 6. An iterative and flexible approach is critical for the implementation and refinement of long-term WUE targets. Once long-term water use targets are established, water agencies should be provided sufficient time and full flexibility for implementing local and/or regional programs in the context of the entire interconnected urban water cycle. Customers' water rates will increase to address costs associated with adapting to potential impacts in the midst of reduced revenues. To lessen the financial impact on customers, particularly those in disadvantaged communities, water agencies need adequate time to fully achieve targets to allow for incremental rate increases. Given the long-term nature of WUE targets, the state should evaluate compliance through longer-term planning efforts such as UWMPs, and not on a monthly basis.
- 7. CUWA agencies continue to advance water use efficiency with the following approaches:
  - Promoting continued progress toward California-friendly landscape and outdoor WUE, where significant potential remains.
  - Supporting public education and outreach to encourage and maintain customer behavior changes and technology adoption.
  - Supporting the pursuit of innovative and cost-effective technologies, best practices, and new programs that improve WUE and ease adaptations to new low flow expectations.

- Collaborating with other utility organizations, land use agencies, public stakeholders, and state and federal agencies involved in advancing WUE programs.
- Working with the State to advance applied research and implement new and emerging technologies, including predictive analytical tools, to better inform smart water management and WUE.