

**Kathryn Sorensen
Director
City of Phoenix Water Services Department**

**Testimony Before the
Committee on Energy and Natural Resources
United States Senate**

**Legislative Hearing
On**

**S. 2563 – “Water Supply Infrastructure and Drought Resilience Act of 2018”
S. 2560 – “Reclamation Title Transfer Act of 2018”
S. 2539 – Reauthorization of Colorado River System Conservation Program**

March 22, 2018

My name is Kathryn Sorensen, and I am the Director of Phoenix Water Services, the largest potable water utility in Arizona. We provide safe, clean drinking water to approximately 1.6 million people across 540 square miles and provide wastewater treatment services for nearly 2.5 million people in the Valley of the Sun. Phoenix Water is one of the nation’s ten largest potable water utilities.

I would like to thank the Committee for recognizing the importance of addressing drought resilience and water scarcity in the West. I would also like to thank Senator Flake for introducing this bill, and for his strong leadership in water issues which are so important to Arizona. These issues are of great concern to the City of Phoenix because of course it is the delivery of safe, clean, reliable water that provides the foundation of public health, economic opportunity, and quality of life in our desert city.

The 2018 Water Supply Outlook for the Colorado River Basin is terrible. Basin-wide, snowpack stands at a paltry 72% of normal and on the Salt & Verde River system, which supplies 60% of the water used in Phoenix, it stands at only 22%. The last time we faced these conditions was in 2002 – but back then, we faced them with a Colorado River reservoir system that was nearly full. Today, we face those conditions with a system that is only half full. After nearly two decades of drought on the Colorado River System, we have no way of knowing whether this is year eighteen of an eighteen-year drought or year eighteen of a 100-year mega-drought. Perhaps the word drought no longer applies. It appears that diminished snowpack and precipitation, along with record-breaking heat, is the new normal.

In this new normal, we must plan methodically for worst-case scenarios, because the consequences of failing to deliver safe, clean, reliable water supplies are unthinkable. A recent Reuters article noted that three years ago the chance of a three-year drought in Cape Town, South Africa was less than 1%. Cape Town is now learning, in the most tragic way, that any scenario that results in a loss of water supply to a major city – however unlikely – is unacceptable and must be proactively avoided. The kicker is that planning for water supply resiliency, and the infrastructure necessary to achieve it, is a long-term,

continual effort. By the time Cape Town knew it was in serious trouble, it was too late to build the necessary infrastructure to prevent worse-case outcomes.

When it comes to water supply availability, Phoenix is held to a higher standard than any other city in the country. That's as it should be. We are after all located in the middle of the Sonoran Desert and therefore our standard must be absolute certainty. Public health mandates it. Economic investment is contingent upon it. Quality of life depends on it. The key to meeting this standard is infrastructure.

The delivery of safe, clean, reliable water is dependent on infrastructure: Storage projects, reservoirs, canals, surface water treatment plants, wells, pump stations, valves, and pipelines.

New investments in infrastructure are needed throughout the West to increase certainty. In Phoenix's case, this means building additional well capacity to pump water we have stored in groundwater aquifers for use during Colorado River shortages, and in large transmission mains that move water to portions of our service territory that are vulnerable during Colorado River shortages. We must also continue to be vigilant of our culture of conservation, continue to reclaim our wastewater and reuse it, and continue to recharge our aquifers.

Our ability to meet the challenge of water scarcity has always relied on innovative local initiatives, but also on a strong partnership with the federal government, particularly the important Bureau of Reclamation projects that provide reliable water supplies to entire regions and across municipal, industrial, and agricultural sectors of the economy. That continuing partnership is critical for the coming years. In Arizona and across the west, these water storage projects increase water security and flexibility. Collaborative, flexible, innovative management of these storage projects has a multiplier effect on water security and drought resilience.

Some of the measures that the Committee is considering in this and other bills – such as continuing the WaterSMART program, ensuring proper asset management of Reclamation infrastructure, allowing for more flexible use of Reclamation dams, and providing flexibility in the use of Reclamation infrastructure for aquifer recharge are examples of how the federal government can increase water management resiliency in the arid west. Providing regulatory compliance paths that are predictable and efficient allows proper planning and investment in infrastructure to take place. The West has a long history of managing water scarcity but we are facing an unprecedented test that will demand innovation, collaboration, flexibility in the management of our infrastructure, and greater regulatory certainty.

The water supply outlook is terrible, but I am absolutely confident that with appropriate investment in infrastructure, collaborative and innovative partnerships, increased flexibility, and a vigilant focus on a culture of conservation, we will continue to provide safe, clean, reliable water deliveries to our desert city even in worst-case scenarios and for generations to come.