Improving water reliability for region

UT San Diego

By Sherri Lightner& Lani Lutar 5 p.m. Feb. 19, 2014

Last year was the driest on record in California, prompting Gov. Jerry Brown to declare a drought emergency across the state.

Here in San Diego, we're all too familiar with droughts and the impacts they have on our environment, businesses and ratepayers.

Who can forget the devastating firestorms that quickly swept across the region in 2003 and again in 2007? Then, in 2009, the city of San Diego declared a drought emergency, and residents and businesses were required to scale back their water use.

San Diegans responded, quickly cutting our water consumption by 11 percent — and, eventually, by 20 percent. Today, through conservation, San Diegans have slashed their water use by more than 31 million gallons per day.

In addition to conservation, the city has made a number of changes to improve water reliability. In 2011, the San Diego City Council adopted a Comprehensive Water Policy to serve as a blueprint to ensure a reliable local water supply now and in the future. Before this step, city water policies were fragmented and inconsistent.

More recently, the appointed Water Policy Implementation Task Force presented more than 40 recommendations to the City Council, including the implementation of cutting-edge technologies such as desalination and advanced water treatment. The council immediately adopted more than half of the recommendations, and the remaining ones have been prioritized and are being further evaluated.

The city also made an investment in a water reuse demonstration project to study the impacts of purifying recycled water to augment our local water supply. The results of the demonstration project concluded that once treated and purified, the water is of higher quality than what is currently flowing from our taps across San Diego.

No doubt San Diego is better prepared today than a decade ago to respond to water supply challenges. In fact, local water officials say even in these drought conditions there will be enough water this year — thanks to greater storage capacity and increased diversification of sources.

No matter what the city's water situation currently is, we still need to do more. There's no one solution to achieving lasting supply independence. We must use all the tools available to us, including conservation, desalination, recycling and reuse.

Conservation is the cornerstone of the city's long-term water policy. That means fostering a culture of water saving and resource stewardship throughout the region, and encouraging all of us to make changes in our daily water use.

The city and County Water Authority offer residential and commercial water-users a bucketful of rebate and retrofit programs for turf replacement, high-efficiency irrigation systems and appliances.

But saving alone won't solve our water supply situation. Emerging technologies are being tapped to pump more water back into our storage and delivery system.

Advances in desalination technology will make it a more energy-efficient and environmentally sensitive way to capitalize on what's available in our local groundwater basins and the vast water supply offered by the ocean.

Water reuse technology has been around for several decades, and it has been used successfully in neighboring counties and across the globe. Several leading firms that specialize in developing the technology used in water reuse systems are located right here in San Diego County.

The success of large reuse projects, in places as close as Orange County and as far away as Singapore, clearly indicates that public agencies can recycle wastewater into drinking water reliably and safely. If steps are taken now to take advantage of this technology, as much as 40 percent of San Diego's water supply could come from water reuse over the next 20 years.

We already recycle some water for irrigating our yards through greywater systems, a process by which water from a home's washing machine, bathtubs, showers and sinks is recycled on-site and reused for outdoor watering. Just last year, the city enacted a plan to streamline permitting for these types of systems

Clearly, much progress has been made. We are encouraged by that and proud to see San Diegans stepping up their water-saving practices to help address our long-term needs head on.

We envision a city that has a reliable, affordable and sustainable water supply needed for a robust regional economy and enviable quality of life.

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