

Ocean water is answer to drought

By Robbie Hunter Special to The Bee

At the State Building and Construction Trades Council, we agree with the San Diego County Water Authority – the Carlsbad desalination plant can't come online fast enough.

There is no denying that California is in desperate need of a reliable, drought-proof water supply. We are facing the worst drought in our state's history, going back nearly 120 years. Scientists say this drought is the "new normal" and that drier conditions are here to stay. Couple this with California's population reaching the 50 million mark by 2049, and it becomes clear that demand will quickly outpace our current water sources. Combined with climate change and aging water infrastructure, residents, the environment and agriculture will continue suffering.

We applaud efforts throughout the state to reduce and reuse water, but unfortunately, conservation and water-recycling efforts alone can't save us from the looming mega-drought. We need to embrace all forms of "new water," including seawater desalination.

That is why we must respectfully disagree with desalination opponents. Rather than push seawater desalination to the bottom of the list of possible solutions, we should view it as one of several useful tools to address the state's growing water needs.

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For most of the state's history, the best sources of municipal water were from lakes, reservoirs, ground wells and snowpacks. Those avenues have begun to fail us as they become less reliable, more ecologically harmful and more costly. And it has become clear that State Water Project allotments from Northern California – cut to 5 percent this year – are no longer reliable during a drought.

Now we have a chance to make use of the Pacific Ocean to provide drinking water. The technology behind desalination has dramatically improved, while its costs have plummeted to half of what they were two decades ago. With the cost of imported supplies from Northern California increasing and the reduction in Southern California's allotment from the Colorado River, desalinated water is now more competitively priced with any new high-quality water supply.

In fact, water produced at the Carlsbad plant will cost roughly half a penny per gallon to produce and deliver. That translates to less than \$1 a day for the average San Diego resident, and water rates won't fluctuate based on availability. Best of all, advances in technology and efficiency will mean that the cost of desalination will continue to decrease, while water instability could cause imported water costs to soar.

The reverse osmosis seawater desalination process doesn't generate greenhouse gases. Modern desalination facilities have cut energy consumption in half by utilizing state-of-the-art devices that consume no electrical power



and recycle otherwise lost energy, much like a hybrid car.

In fact, the energy needed to produce a San Diego County household's share of desalinated water is less than the amount needed to power one standard 42-inch plasma TV. When completed, the Carlsbad plant will be the largest and most technologically advanced, energy efficient and most environmentally sound seawater desalination plant in the Western hemisphere.

And projects like the Carlsbad desalination plant don't just mean millions of gallons of clean drinking water; they mean millions in revenue and thousands of jobs.

By no means do we believe that desalination is a silver bullet, but it is a drought-proof, locally controlled source of drinking water. By 2030, desalination could provide 10 percent of California's municipal and industrial demand, taking pressure off urban populations and the state's vast agricultural industry.

Just as our communities take advantage of a mix of energy sources to minimize costs while maximizing access, we support the use of desalination, along with conservation and wastewater recycling, as a source of "new water" for California.

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