

Board Director Guest Column
Director Linda LeZotte, District 4

Combatting climate change

The drought we all recently experienced in California was not only the longest dry spell in history, it was also a forewarning of the extremes that await with a changing climate. Five years of severe drought morphed into deluge shortly after with record rainfall in northern California.

As the county's water resource agency, the Santa Clara Valley Water District works to respond to the looming impacts of climate change in our mission to provide Silicon Valley with safe, clean water for a healthy life, environment, and economy. We're preparing for wet and dry years, whether that means diversifying our water supply resources to protect us from droughts, or accounting for rising sea levels in our flood protection projects.

Rising global temperatures and warmer oceans result in rising sea levels and altered weather patterns. This means more intense and longer heat waves and varying changes in rainfall (not enough or too much). All of these carry dangerous consequences for the Bay Area.

The last decade has been riddled with record-setting temperatures. Every year has been warmer than the last, threatening our water supplies. In 2015, snowpack in the Sierra Nevada was dismal, leaving very little to melt and flow to the Delta, where we receive 40 percent of our water supply. With imported water supplies so vulnerable, the district is focused on diversification, including expanding our water conservation and water reuse programs. This helps protect our drinking water during droughts. We are also exploring additional storage opportunities such as an expanded Pacheco Reservoir to increase our emergency water supply.

Rising temperatures also challenge our flood protection efforts. Sea levels are rising as a result of increased temperatures. Studies indicate that San Francisco Bay may experience 13 to 23 inches of sea level rise by 2050. This leaves Santa Clara County's shoreline at great risk of coastal flooding. With many high-tech companies and major infrastructure located along the shoreline, Silicon Valley's residents and economy stand to suffer.

In 2012, as board chair, in my "State of the District" address, I requested staff include the effects of climate change in the Board Governance Policies of the water district. As a result, the water district is responding and preparing by improving our understanding of climate change impacts on water resources, including flood risks. Our flood protection projects include analysis of rising seas, coastal impacts, and fine-tuned rainfall data. These findings are incorporated into project planning and design. In fact, we are incorporating our analysis of rising sea levels in flood protection projects in Sunnyvale and Palo Alto.

At the same time, we are focused on preserving our watersheds. As environmental stewards, we strive to nurture healthy creeks and protect and restore habitat for wildlife. Wherever appropriate, we enhance stream and coastal ecosystems with riparian planting, preservation of

open space, and restoration. These are forms of natural flood protection; native and dense vegetation can slow storm surges and delay erosion. They also improve habitat and encourage the return of endangered species.

To brace Silicon Valley against climate change, the water district understands the importance of regional partnerships. In a united effort to protect our shoreline communities, the California State Coastal Conservancy and U.S. Army Corps of Engineers are working with the water district on the South San Francisco Bay Shoreline Project. This project will reduce flood risks in the face of rising seas between Alviso Slough and Coyote Creek. This month, the federal government promised \$177 million in Disaster Supplemental Funding for the project.

In coordination with the South Bay Salt Pond Restoration Project, the study is centered on protecting the most vulnerable shoreline region. The projects will aim to restore historic wetlands on over 15,000 acres of former salt ponds. The effort includes a series of levees, wetlands and transition zones, which mimic natural landforms lost to past operations of salt production ponds.

While the degradation of our natural resources has happened over centuries, the gradual impacts of climate change are more prominent each year. Preparing for and reducing climate change impacts requires an active strategy. That's why the water district will be completing a Climate Change Action Plan by 2019. The plan will identify impacts, risks, and strategies to continue supplying clean, safe water and protecting residents in Silicon Valley. To learn more about the district's efforts combatting climate change visit: www.valleywater.org/climate-change.

As always, I am available for questions or comments as your District 4 representative for the City of Campbell, portions of Willow Glen and the Cambrian, North Almaden and Blossom Hill neighborhoods of San Jose. Feel free to contact me at (408) 265-2600 or at llezotte@valleywater.org.