

## **Drought, Fire, and Floods**

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Natural disasters are inevitable and, unfortunately, the Carpinteria Valley has recently been hit by three: Drought, Fire, and Floods. It is our mission at Carpinteria Valley Water District (CVWD) to supply safe reliable water, even in the midst of a natural disaster. CVWD has learned from these unprecedented events and will use this information to improve our emergency response moving forward.

Since the drought began in 2012, our area has faced extremely dry conditions. There was a glimpse of hope in 2017 when the Carpinteria Valley experienced average rainfall; however, this was brief and was not enough to replenish our water supplies. Over the last six years, we have focused on managing our water supplies to ensure that we can make it through periods of extended drought. In recent years, the District has utilized more State Water than ever before and has tapped into supplemental water programs from other areas of the State. In addition, we have developed groundwater facilities to take advantage of the large groundwater basin beneath the Carpinteria Valley and have established policies to manage the remaining supplies in Lake Cachuma. Planning has been key to surviving the longest and driest drought on record. Thanks to conservation from our customers and proactive water supply management we have been able to make it, but we now know that we need to develop a local drought-proof water supply to prepare for the future.

The Thomas fire was an unexpected turn of events at the end of 2017. Thousands of firefighters from across the nation assisted in fighting the massive fire that burned over 280,000 acres and caused hundreds of millions of dollars' of damage. CVWD staff worked around the clock to ensure that water was available for fire suppression. Reservoirs were filled to make certain Carpinteria had water for the entire valley. Generators were fueled at each critical facility and portable generators were placed at facilities that did not have generators. District staff worked with Emergency Services to provide information so these critical facilities could be prioritized. The District suffered some minor damage during the fire, but these losses were small given the scale and intensity of the event.

Once the dust and ash settled on the Thomas fire, it became clear that flooding and debris flows were likely given the burn area conditions. CVWD believed it had several facilities that were at risk and the necessary steps were taken to prepare. We knew prior to the floods that CVWD would need to have a plan in the event that the South Coast Conduit was to break or the water from Lake Cachuma was to become unusable due to debris flows. We were ready to fill our distribution system with solely groundwater if needed. During the flooding CVWD suffered minor damage to its facilities. However, our concerns about losing the conveyance through the South Coast Conduit became a reality. Initially, it appeared that there were breaks in the South Coast Conduit, but the water loss to the system was later attributed to breaks in Montecito's water mains. Thankfully, Carpinteria's local groundwater basin bridged the water supply as pipelines were repaired and the South Coast Conduit was restored to service.

Through the drought, fire, and floods CVWD was fortunately able to provide water without interruptions or water quality emergencies. Some of our fortune was simply luck, but much of it was due to planning and working through vulnerabilities in our water supply systems. CVWD staff is hard at work analyzing our preparedness and our response to the Thomas fire and floods. We have learned that we need to have disaster-proof communication between staff, first responders, and our facilities. We have seen that time is of the essence and getting information to the right people in an efficient manner is imperative. In addition, we have learned that local water supplies are the most reliable during a disaster and we believe that our proposed recycled water project will help create a local resilient water supply to that end. If you are interested in learning more about the Recycled Water Facilities Plan, please visit our website [www.cvwd.net](http://www.cvwd.net), follow us on Twitter @CarpWater, and like Carpinteria Valley Water District on Facebook.