



# Flood Control Channel Maintenance

## Alameda County Flood Control and Water Conservation District, Zone 7

Thank you for your patience during the summers as we make important repairs to our flood control channels from the 2017 storm events. We value the city and parks partners that utilize our maintenance roads as trails for the community. Public safety and upholding our duties as a flood control agency are of the utmost importance and our primary mission. To continue our open communication with the public regarding access and trail closures, please find in this flyer a brief explanation of the history of and current work on the flood control channels in your community.

### History

Pre-development, the southern portion of the Valley in particular was primarily perennial and seasonal wetlands. In the 1800s, European settlers began to drain the marsh and channelize the water that had previously spread out across the valley as it flowed down from the hills. As land use changed and the area became increasingly urbanized, the flood control channel system was constructed into what we see today. In doing so, however, engineers forced the water into a new flow path often constructed from expansive clay soil whose qualities are not ideal for structural purposes. Without maintenance of these channels, the water would slowly revert back to its natural flow pattern where so many people now live. Today, not only do the flood control channels direct water to drain out of the valley, they also protect the homes and infrastructure along them and the utility lines buried in their banks.

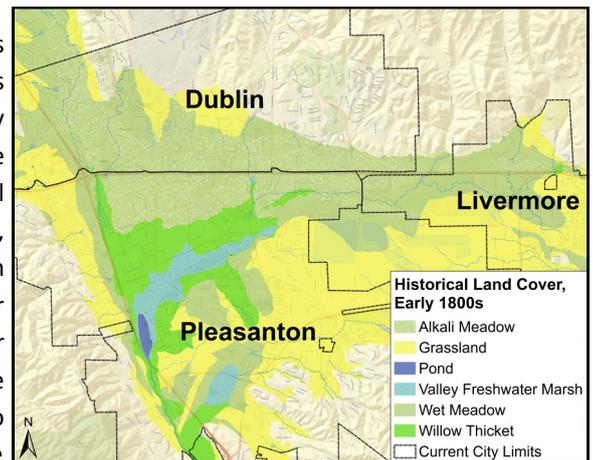


Figure 1: Historical Ecology of the Valley

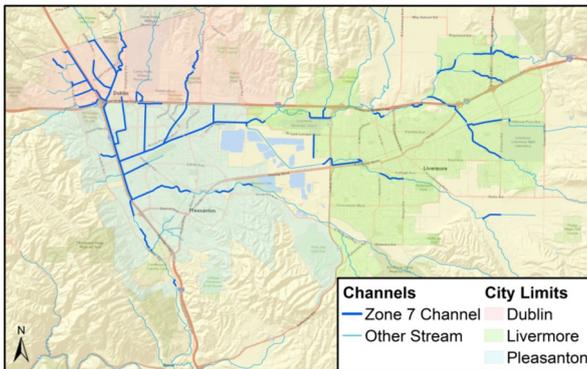


Figure 2: Current Z7 Flood Control Channels

### Zone 7's Work

Zone 7 Water Agency is committed to providing an effective flood control system to the Livermore-Amador Valley. As a part of this mission, we must repair any damages that threaten the integrity of the flood control channels. In general, major bank damages along the principal channels in Pleasanton are caused by a process geotechnical engineers call "rapid drawdown." The water rises and saturates the soil during major rain events, then quickly recedes. When this happens the support for the increased weight of the saturated soil on the upper bank is lost and it may fall.

Some channels can be stabilized with vegetation plantings and biotechnical solutions. Where a more engineered fix is necessary, repairs may consist of rebuilding the slope with carefully placed 1/4 to 1/2 ton rock, which provides greater structural support than the soil alone.

Zone 7 does what is feasible to reduce construction impacts on the residents, including abiding by City noise ordinances and work hours, dust control, stormwater pollution prevention, and minimizing trail closures where we can. However, it is unfortunately impossible to eliminate all potential nuisances of construction and unsafe to allow pedestrian traffic through a construction zone.

We continue to ask for your cooperation as we fulfill our mission that is vital for the safety of the entire community. In the winter of 2017, a greater than average number of atmospheric rivers hit the west coast and were responsible for the large storms in Northern California. The extreme weather, preceded by 5 years of drought, caused about 20 times more damage than the flood control channel system normally experiences in a year; work to repair all of this damage continues still. In 2017 and 2018, a total of 44 repairs were completed; more repair work is planned for the upcoming 2019 construction season.

As always, we are available to address any concerns from the public. Please direct communications to

Kerri Smyth, Junior Engineer  
Phone: 925-454-5079  
E-mail: ksmyth@zone7water.com

Andy Chamberlain, Assistant Engineer  
Phone: 925-454-5080  
E-mail: achamberlain@zone7water.com

Joe Seto, Principal Engineer  
Phone: 925-454-5085  
E-mail: jseto@zone7water.com