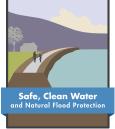
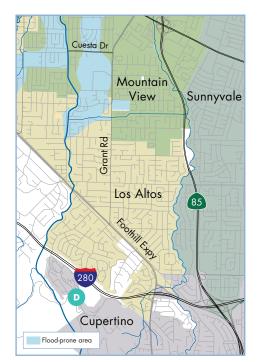


# Rancho San Antonio County Park detention basin

## Permanente Creek Flood Protection Project





The Permanente Creek Flood Protection Project will provide natural flood protection for Mountain View and Los Altos, create recreational opportunities and enhance the environment. This project is funded by the countywide Safe, Clean Water and Natural Flood Protection Program parcel tax passed by voters in November 2012.

The four project elements:

- Floodwalls and levees north of U.S. Highway 101 (completed)
- Flood detention area at City of Mountain View's McKelvey Park
- C Widening and deepening of existing channels along Permanente and Hale Creeks (completed)
- Flood detention areas at County of Santa Clara's Rancho San Antonio Park

#### **Questions?**

valleywater.org/permanente-creek (408) 755-0333

To keep excess flows of water from spilling out of Permanente Creek, Valley Water will construct two floodstorage areas off of Permanente Creek in Rancho San Antonio County Park. The detention areas will temporarily store floodwaters until peak flows pass, reducing the need for more flood protection elements downstream.

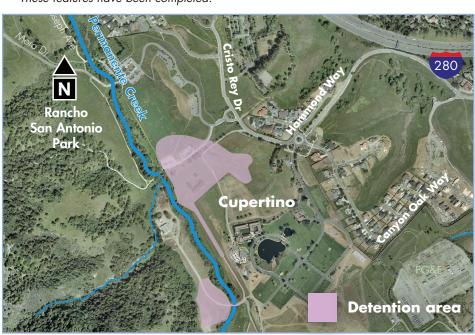
The detention areas will be approximately 12 acres in size and 15 feet deep with mild side slopes, contoured to the surrounding area, and replanted with native trees and grass. Flood flows would inundate the site very rarely and quickly drain away. A 25-year flood, which has a 4 percent chance of occurring in any given year, would result in about one foot of water in the detention area that would drain away in hours. A 100-year storm, which has a 1 percent chance of occurring in any given year, would fill the area, but it would drain out in one to four days.

#### **Features**

- A 15-foot deep depression to collect peak storm flows from Permanente Creek
- Planting of native trees
- Removal of non-native trees that compete with native species
- Replacement of existing maintenance bridge
- New restroom facilities\*
- New, enlarged paved parking area with designated equestrian spaces\*
- \* These features have been completed.

### **Benefits**

- Enhances many acres of wildlife habitat
- Provides flood protection for thousands of homes and businesses in Mountain View and Los Altos, saving residents thousands of dollars on flood insurance each year
- Reduces construction impacts to downstream residential and businesses areas
- Reduces flow rates, allowing for potential riparian restoration downstream







## What to expect during construction

Construction of the Rancho San Antonio County Park detention basins began in late 2016. During initial construction activities, we unexpectedly encountered sensitive environmental resources and halted construction to protect these resources and comply with federal and state environmental regulations. Together, Valley Water and the United States Army Corps of Engineers finalized a plan to manage ongoing construction. The Army Corps reauthorized the Rancho San Antonio project in June 2019 with an expected Spring 2020 project completion. Work on the project reached 80% completion before it was paused.

Valley Water, Santa Clara County Parks, and Midpeninsula Regional Open Space District are working together to minimize construction impacts as much as practical and in accordance with county ordinances. We appreciate your understanding and cooperation as we embark on this important flood protection project.

- Regular construction work hours are 8 a.m. to 5 p.m. Work is scheduled Monday through Friday. When needed, Saturday work will be scheduled and coordinated with Midpeninsula.
- The main detention basin will be constructed between the main park entrance and the Gate of Heaven Cemetery.
- Much of the Hammond -Snyder Loop Trail is closed during construction.
- Trucks will drive on the Hammond-Snyder Trail to Stevens Creek Boulevard (to avoid Cristo Rey Drive) when hauling materials to and from the site.
- Safety of the community and our employees is our priority. Barricades, railings, lights, fences and other warning devices will be used for the greatest public safety and convenience.



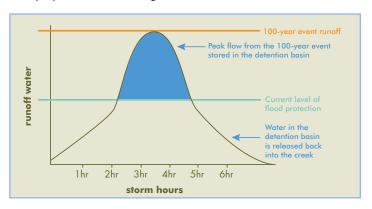
Before project: View of Rancho San Antonio in March 2016.

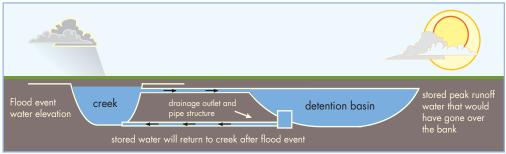


After project: Visual rendering of Rancho San Antonio basin.

## What is a flood detention area?

Flood protection methods can include berms around buildings, widening channels, raising floodwalls, elevating structures and roadways, and/or constructing a bypass channel. In areas where development limits widening the creek or raising floodwalls, flood-storage basins are used to temporarily divert and store floodwaters until a major storm passes.





Above: The graph illustrates a sample hydrograph timeline of a 100-year flood event on Permanente Creek.

Left: During a flood event, excess water from the creek flows into detention basins. The basin protects downstream homes and properties by holding the water until the flood passes.