D 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
- B Flood detention area at City of Mountain View's McKelvey Park
- Channel widening and deepening of existing channels along Permanente Creek
- Flood detention areas at County of Santa Clara's Rancho San Antonio Park

Questions?

valleywater.org/services/ PermanenteCreek.aspx (408) 755-0333 To keep excess flows of water from spilling out of Permanente Creek, the Santa Clara Valley Water

District will construct two flood-storage 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 bathroom facilities
- New, enlarged paved parking area

Benefits

- Potentially enhances many acres of wildlife habitat
- Provides flood protection for thousands of homes and businesses in Mountain View and Los Altos
- Reduces construction impacts to downstream residential and business 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 is expected to begin in late 2016 and take approximately two years to complete. The Santa Clara Valley Water District and Santa Clara County Parks 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.

- The main detention basin will be constructed between the main park entrance and the Gate of Heaven Cemetery.
- The South Meadow parking lot will be open throughout construction. The new, expanded parking lot and bathroom will be built first, slightly north of the existing equestrian parking lot. Upon completion of the new facilities, the existing parking lot will be closed.
- A visual screening fence will be installed around the construction areas.
- Various parts of the South Meadow and Hammond-Snyder Loop Trails will be closed during construction. Trail accessibility signage will be installed at least two weeks in advance of any closures.
- Regular construction work hours are 8 a.m. to 5 p.m. Work is scheduled Monday through Friday, excluding legal holidays.
- 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.

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, floodstorage basins are used to temporarily divert and store floodwaters until a major storm passes.







Top: Existing view of Rancho San Antonio County Park. Bottom: Photo rendering of future flow detention design at Rancho San Antonio County Park.



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.