

Lower Penitencia Creek Improvements Project

About the project

Lower Penitencia Creek receives storm flows from Berryessa Creek and flows into Coyote Creek. Construction has begun on improvements to Berryessa Creek that will bring more storm flows into Lower Penitencia Creek. In its existing condition, Lower Penitencia Creek does not have the required capacity to convey the increased storm flows when Berryessa Creek flood improvements are completed.

The Lower Penitencia Creek Improvements Project extends approximately one mile from its confluence with Coyote Creek to San Andreas Drive in Milpitas. This project is necessary to provide continued flood protection for residents and businesses currently protected along the one mile project area.

This project is funded by the water district's Watershed Stream Stewardship fund and California Department of Water Resources Proposition 1E grant.

Santa Clara Valley Water District

Lower Penitencia Creek Improvements Project



Project background

Lower Penitencia Creek is located in the northeastern portion of Santa Clara County within the City of Milpitas. The project extends approximately one mile from its confluence with Coyote Creek to San Andreas Drive.

In 1955, the water district improved Lower Penitencia Creek and additional improvements were constructed in the 1980s related to the construction of the Dixon landing Business Park. Improvements to the channel included widening the channel and raising the levees to increase its capacity to carry storm flows.

The water district has two capital flood protection projects located immediately east of Lower Penitencia Creek, the Lower and Upper Berryessa Creek projects. Completion of improvements along both Berryessa Creek projects will result in an increase of storm flows to Lower Penitencia Creek.



Standing on east levee looking at San Andreas Drive (1981).

Map of Lower Penitencia Creek and highlight of project area.

This project would prevent the increased one-percent flow from overtopping the banks of Lower Penitencia Creek.

*A one-percent flood is a large and rare storm event which has a one-in-100 (one percent) chance of occurring in any given year.

The completion of this project is necessary to maintain the current existing Federal Emergency Management Agency (FEMA) accreditation along the east levee located between California Circle and Berryessa Creek. When improvements are completed for the Lower Penitencia and Berryessa Creek projects, the water district will update the FEMA flood insurance maps accordingly.

^{*}Flooding in nearby areas caused by other creeks will be addressed in a separate project.



Standing on east levee looking west at California Circle.

Objectives

Overall project objectives are to:

- Convey the Lower Berryessa Creek one 1-percent design flow.
- Meet required water surface elevations at Coyote Creek and Berryessa Creek confluences.
- Minimize the need for seasonal removal of sediment and non-woody vegetation.
- Maintain existing Federal Emergency Management Agency (FEMA) accreditation along the east levee located between California Circle and Berryessa Creek.
- Ensure the improvements meet FEMA certification requirements.

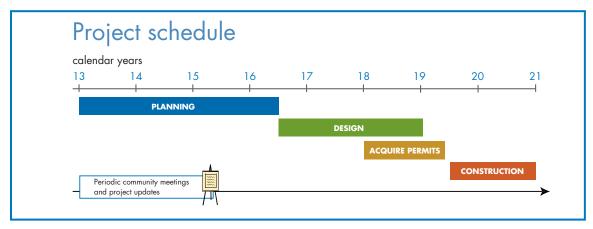
Design phase

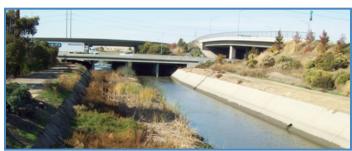
The project is currently in the design phase. The water district board of directors awarded a consultant agreement to Horizon Water and Environmental to develop the Environmental Impact Report in March 2015. The district board also awarded a consultant agreement in May 2016 to Wood Rodgers to perform project design services. The Current project consists of the following elements:

- Vegetated bench
- Relocation and raising of existing levees
- Construction of new floodwalls
- Construction of new headwalls at San Andreas Drive

To date, the water district has:

- Prepared 60% design plans, specifications, and cost estimate in April 2017
- Board certified EIR in November 2017.
- Submitted permit applications to regulatory agencies in March 2018.
- Received draft permit from California Department of Fish and Wildlife in September 2018.





Standing at California Circle looking west at Highway 880.



Standing at California Circle looking east.



Standing on south side levee looking east towards Highway 880.



Standing on west levee looking north at Milmont Drive.

More about us

As the county's primary drinking water provider, the Santa Clara Valley Water District ensures the safety and abundance of drinking water. We operate 10 reservoirs which catch local rainfall and we import water from the Sierra Nevada snowmelt through the Delta. Some of that water replenishes the underground aquifer for later pumping from wells and some goes to one of our three drinking water treatment plants. Once we treat and test the water to meet all state and federal drinking water standards, we sell it to local water providers like the City of Milpitas that resell it to individual homes and businesses. The water supply in some areas in northern Santa Clara County, including the City of Milpitas, where this project is located includes Sierra Nevada water imported through San Francisco's Hetch Hetch system.

The water district also has a major role in the stewardship of local water resources. We care for hundreds of miles of streams by removing invasive vegetation, repairing creek bank erosion, planting native vegetation and removing sediment that can impact the creek's ability to carry floodwaters during rainy months. We also have many programs to reduce pollution and contamination in these waterways. Where the flood threat is significant, we undertake large construction projects such as building levees or replacing undersized bridges. Often, the water district can partner with a city or the county to open a trail or park alongside the creek, providing a recreational amenity for all to enjoy.



You're in a watershed

No matter where you are, you're in a watershed. A watershed is the area of land that drains a common waterway. In Santa Clara County, our creeks catch rain and runoff from storm drains and carry the water north to San Francisco Bay or south to Monterey Bay. Along the way, some of the water is used to fill reservoirs for drinking water, replenish the underground aquifer

This project is in the Coyote Watershed. Sixteen major creeks drain this 322-square-mile area. The county's largest watershed extends from the urbanized valley floor upward to the vast natural areas of the Diablo range. Coyote Creek, its main waterway, is the longest creek in the county.

and create better habitat for fish and wildlife.

We speak your language

Si habla español y tiene preguntas sobre el contenido de este mensaje por favor de comunicarse con José Villarreal al JVillarreal@valleywater.org (408) 630-2879

Nếu bạn nói tiếng Việt và có thắc mắc về nội dung của thông báo này, xin vui lòng liên hệ với Triet Trinh tại TTrinh@valleywater.org hoặc (408) 630-3211.

如果你說中文並對上述訊息有疑問, 請聯繫 Sarah Young, 電郵 syoung@valleywater.org,或者電話: (408) 630-2468.

