

POINTS OF INTEREST

1. San Francisco Bay Trail. Catch the Bay Trail on Carl Road, at the west end of the Sunnyvale Water Pollution Control Plant parking lot. Follow the trail north along Sunnyvale West channel and then east around the back of the plant where interpretive signs tell the natural and cultural history of the marshlands. The trail also passes the outfall where the plant discharges treated wastewater into Moffett Channel, thence to the bay. A large diameter pipe is visible to the north, along the edge of the levee going to the oxidation ponds. This pipe moves wastewater to and from the oxidation ponds as a part of the plant's final treatment process.

2. Twin Creeks Sports Complex. Flowing to Guadalupe Slough, Sunnyvale East Channel bounds the sports complex on its west and north sides. The smaller storm water drainage channel directly west of the Sunnyvale East Channel was originally constructed to drain agricultural areas and then rebuilt to collect urban runoff. This stormwater channel runs parallel to the Sunnyvale East Channel from Highway 237 to the Bay Trail bridge, and then turns west toward Sunnyvale's stormwater pump station where it discharges into a branch of the Moffett Channel.

3. Sunnyvale Baylands Park. The 177-acre park is on the southern margin of what historically were tidal marshlands, but levees now surround the park to prevent flooding from Calabazas Creek and Guadalupe Slough. Take the Wave Walk out to the viewing platform where a small piece of the natural upland marsh is still visible. Ahead of you, from right to left, the land gently slopes down to a shallow seasonal wetland. This gentle transition was once present all along the edge of the tidal marsh in the South Bay. However, most of the natural tidal marsh to upland transition areas have been lost due to the development of engineered levees, ponds and filled land. Pickleweaved plantings improved habitat for the endangered salt marsh harvest mouse.

4. Fair Oaks Park. Sunnyvale East Channel borders this attractive city park. Originally, there were no creeks in this part of the valley between Calabazas and Stevens creeks. To prevent local flooding of this poorly drained area, Sunnyvale East and Sunnyvale West channels were excavated to convey Sausalito creek to the bay. Sausalito creek lines the levees to prevent erosion, incidentally providing nooks for spring wildflowers.

5. San Tomas Aquino Creek Trail. Stop at the Tasman Drive bridge and view informative signboards at street level, or enjoy the concrete relief panels of creek life along the trail beneath the bridge. A footbridge connects the golf course parking lot to a paved trail on the west bank of the creek. Running a straightened course between widely spaced levees, the tule-lined creek is a haven for wildlife. Sit beneath the bridge is testimony to the height of floodwaters. The trail extends from Agnew Road north to the Bay Trail.

6. Alviso Marina. Created in 1965, the Alviso Marina was abandoned to siltation in the late 1970s. The reestablished marsh – dominated by tules – enveloped much of the marina, and the mired docks prompted the marina's closure. Plans to establish a new launch ramp with access to Alviso Slough for smaller watercraft are under consideration. Trails lead from here out into the wildlife refuge.

7. South Bay Yacht Club. In 1985, construction of a flood-protection project necessitated elevation of the clubhouse and relocation about 100 yards north. The 1983 floodwaters rose to almost six-feet deep in the 1900s vintage clubhouse at its former location. Walk the levee trail south from the marina to view the river and this fine old building.

8. Victorian houses. These beautiful old homes have weathered many floods. Flooding has been frequent in Alviso since its incorporation in 1852 as a shipping port. The town's low elevation, its location at the mouth of the Guadalupe River and at the edge of the tidal marsh, and the ground's subsidence of over ten feet since then's establishment have each contributed to repeated disasters. High levees now surround the town for its protection.

9. Ulistac Natural Area. The city of Santa Clara preserved these 40 acres along the Guadalupe River in 1997 as one of the last pieces of undeveloped land in the area. Volunteers are now working to restore natural habitats to the land, historically used for ranching, agriculture, and a golf course. A small, elongated wetland is a remnant of a former meander channel of the Guadalupe River. At present, the river follows a straighter course between high artificial levees.

10. Thamen Park. Brand new, this city park offers safe access to the Guadalupe River trail. Walk the unpaved trail on the west levee or cross the footbridge to the paved trail on the east levee. From the bridge, enjoy the view of the river and its extensive riparian habitat. In 1776, Juan Bautista de Anza originally named Guadalupe River Rio Nuestra Señora de Guadalupe. Although a smaller stream than Coyote Creek, it has retained the name river.

11. Marsh to upland transition. The transition between bay and land was particularly broad in the low-lying area between Guadalupe River and Coyote Creek. Here the gentle gradient of the alluvial plain met the tides in an ecotone of seasonal wetlands, alkali flats, and saltpans. Because of this broad transition and the lack of detailed historical maps of the area prior to Euro-American impacts, the historical boundary line between the tidal marsh and adjacent land is less precise here than in most other areas around the bay. The line shown is based upon an array of evidence, including the testimony of local farmers in 19th-century Mexican Land Grant cases.

12. Alviso Environmental Education Center. Constructed on landfill within the marshlands of the Don Edwards National Wildlife Refuge, the center is a perfect jumping off point for exploration of the tidal marshes and salt ponds. The surrounding New Chicago Marsh, although now cut off from tidal influence, retains many of its original tidal marsh features. Boardwalks allow safe access over a portion of the marsh. Other trails follow the levees around the salt ponds.

13. San Jose-Santa Clara Water Pollution Control Plant. The plant treats sewage from San Jose and Santa Clara and discharges effluent – treated fresh water – through Mallard Slough to the bay. In addition, all storm runoff from the plant grounds is treated as a precaution against any sewage spill that might contaminate the runoff.

14. Mallard Slough. The San Jose-Santa Clara Water Pollution Control Plant discharges effluent into Mallard Slough, an engineered slough that cuts a straight path to the bay. Historically, Artesian Slough meandered through in this area, named for the artesian springs along the margins of the tidal marsh, which provided an input of fresh water to the otherwise saline slough. Some maps still refer to Mallard Slough as Artesian Slough, although little of the original slough remains. Currently, the consistent addition of fresh water into Mallard Slough from the water-treatment plant causes growth of freshwater marsh plants – tule and cattail – instead of salt marsh plants – cordgrass and pickleweed. A trail leading from the Alviso Environmental Education Center to a floating dock provides good viewing.

15. Coyote Creek Flood Control Project. Completed in 1996, this project involved building new levees farther from the creek banks to establish a wide creek corridor or flood control channel. The new levee system replaced the aging and unstable levees constructed by farmers along the meandering creek banks. Coyote Creek still flows between these old levees, but frequent engineered breaches allow it to flood the new, wider corridor. In addition to improved flood protection, the new corridor also provides habitat for riparian plants and animals. View it from the bridge on old Alviso-Milpitas Road, accessible from Ranch Drive west of McCarthy Boulevard.

16. Coyote Creek Lagoon. Accessible from Fremont Boulevard, this lagoon is part of the Don Edwards National Wildlife Refuge. Walk, bike, or run the levee trail and enjoy great bird watching. Originally a seasonal wetland, the lagoon was excavated in the early 1960s for fill dirt to build the nearby industrial park. The lagoon is now open to tidal flow through Coyote Creek in two places. Resource managers hope it will slowly fill with sediment and become a wetland once again.

17. Parallel channel. Parallel to Coyote Creek Lagoon, this wide, marshy channel catches the urban runoff from office parks along Fremont Boulevard. Flow meanders northward and empties into the Laguna Creek channel. The parallel channel is rich with wetland vegetation and wildlife. The vegetation slows the flow of water, allowing time for particles to settle out, oil and grease to break down, and various chemicals to detoxify.

18. Hall Memorial Park. The Lower Penitencia Creek channel flows through this nine-acre park with grass fields and tennis courts. At the western end of the park lie two ponds that are an important component of the regional flood-control strategy. These detention basins, designed to store floodwater during high flow periods, slowly return the water to the creek as floodwaters recede.

19. José Higuera Adobe. This adobe, a city of Milpitas historical site, is nestled beside Calera Creek. Certainly the creek was a valuable resource for the early Spanish settlers. Mature sycamores along its banks attest to the longevity of Calera Creek's channel near the adobe. Downstream of I-680, however, Calera Creek historically spread out, dropped its sediment, and sank into the porous alluvial soils. Like many other South Bay creeks, its channel across the flatlands is artificial.

20. Ed R. Levin County Park. Located in a lovely, secluded valley, this large park offers hiking, fishing, horseback riding, and picnicking. Also called Spring Valley, the park has numerous natural springs. A spring box – a concrete box in the ground that collects the spring water – is visible just up the road from the visitor center and flagpole. With its low roof, the spring looks like a house without walls. However, the creek bed has exposed bedrock, here a striking layered sandstone and siltstone.

21. Sandy Wool Lake. Sandy Wool and Spring Lakes, both artificial, are fed partly by springs and partly by water pumped in from the South Bay Aqueduct. At these lakes, located in Ed R. Levin County Park, visitors enjoy fishing, bird watching, and non-motorized boating. The children's play area at the base of Sandy Wool Lake dam features an artificial creek bed.

22. Berryessa Creek Park. This large city park borders a shaded, natural reach of Berryessa Creek. Riparian trees such as sycamore and box elder line the gravel-bedded stream. Walk along the bank and notice that high storm flows have undermined the tree roots. However, the roots help shield the stream bank from eroding too rapidly. Sometimes an undermined tree will fall.

23. Coyote Creek Trail. The trail, initially completed for several miles in central and southern San Jose, is slated to extend north, connecting to the Bay Trail and other regional trail networks. Currently joggers, hikers, and bicyclists use several unofficial sections of the Coyote Creek trail to enjoy the riparian corridor of the creek. Check with the city of San Jose for updates on access and open segments.

24. Lower Penitencia Creek. In the schoolyard of Orchard Elementary grow mature sycamore trees that once graced the old meandering channel of Lower Penitencia Creek. The creek is now filled in and replaced by underground storm drains in this neighborhood. Beginning north of the Montague Expressway, those storm drains discharge into an engineered channel that eventually empties into Coyote Creek.

25. Penitencia Creek Trail and Park. This trail parallels the creek for several miles along Penitencia Creek Road. The parking lot near White Road provides easy access to the park and trail, which is open to hiking, biking, and equestrian use. Although incomplete at the time of publication, the trail will eventually extend four miles from Alum Rock Regional Park to Penitencia Creek's confluence with Coyote Creek.

26. Robert W. Gross Groundwater Recharge Ponds. From the Noble Avenue Bridge, walk downstream between the canal and Penitencia Creek until you reach three large ponds. Interpretive signs explain that these ponds allow water to soak into the ground and replenish the Santa Clara Valley aquifer. The water in the ponds comes primarily from the South Bay Aqueduct, but water can also be diverted from Penitencia Creek at the Penitencia Creek diversion structure.

27. Penitencia Creek diversion structure. This concrete structure can divert water from Penitencia Creek into a canal that carries the water several hundred feet to the groundwater recharge ponds located just north of Penitencia Creek. Screens keep fish from getting into the canal, and a fish ladder lets them move upstream past the structure.

28. Alum Rock Regional Park. The 720-acre park along Penitencia Creek offers bicycling, horseback riding, hiking, and picnicking in a rugged and natural setting. Dedicated in 1972, it is California's oldest city park. From 1890 to 1932, the park was a nationally known health spa with 27 mineral springs containing seven different minerals. The sulfurous spring water originates as rainwater, and then dissolves minerals from the local bedrock during deep groundwater circulation. Take the trail upstream from the visitor center to see the springs. Typical of the uplands, erosion in the creek bed has exposed bedrock, here a striking layered sandstone and siltstone.

For adjoining area see Creek & Watershed Map of Fremont & Vicinity

For adjoining area see Creek & Watershed Map of West Santa Clara Valley

For adjoining area see Creek & Watershed Map of Central San Jose & Vicinity

CREEK & WATERSHED MAP of Milpitas & North San Jose

By Janet M. Sowers and Stephen C. Thompson, William Lettis & Associates, Inc.
Historical wetlands research by the San Francisco Estuary Institute

This map shows the current waterways of the Milpitas and north San Jose area, including the creek and storm drain network and present-day watershed boundaries. Also shown are the historical creeks, tidal marshes, and willow groves. Many of these historical water features no longer exist. Development resulted in the construction of underground culverts and engineered channels, the diking or filling of tidal marshes, and construction of reservoirs.

Notes: The map shows creeks and engineered channels having a minimum of 0.2 square kilometers of watershed, and storm drains 24 inches or greater in diameter. Smaller features are not shown.

Accuracy: Every effort was made to produce an accurate map. However, no map is completely accurate and all lines should be considered approximate. There is error in the historical maps, in the transfer of historical information to modern maps, and in the modern maps themselves. In addition, natural shifting of creeks and fluctuations in the extent of marshes and lagoons can be expected both before and after the historical maps or photos were made. Marsh and lagoon boundaries are considered accurate to within 2000 feet on either side of the line shown. Former creek locations are accurate to within 200 feet. Present-day creek and storm drain locations are considered accurate to within 100 feet on either side of the line shown.

How this map was made: Storm drains, engineered channels, flood-control channels, and present-day creeks were compiled from city and county data, 1999 and 2001 aerial photography, and field inspection. The historical locations of creeks were interpreted from 1939 aerial photography, previous work by the San

Francisco Estuary Institute (SFEI), and historical maps. Historical tidal marshes and willow groves were researched by SFEI using a variety of sources including the 1857 U. S. Coast Survey. Tidal marsh sloughs are shown only where they are a continuation of an upland creek. Complete documentation can be obtained from Janet Sowers at William Lettis & Associates, Inc. in Walnut Creek, or www.museumca.org/creeks. The base map (showing present geographic features) was prepared by the U. S. Geological Survey in 1980. We added major new roads and streets.

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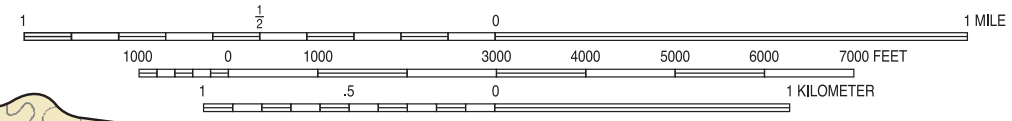
Technical assistance was provided by the cities of Milpitas, Fremont, San Jose, Sunnyvale, and Santa Clara; the Santa Clara Valley Water District; the counties of Santa Clara and Alameda; and Trish Mulvey. Field and editorial assistance were provided by Christopher Richard and Dana Netzel. The map was drafted by Jason Holmberg.

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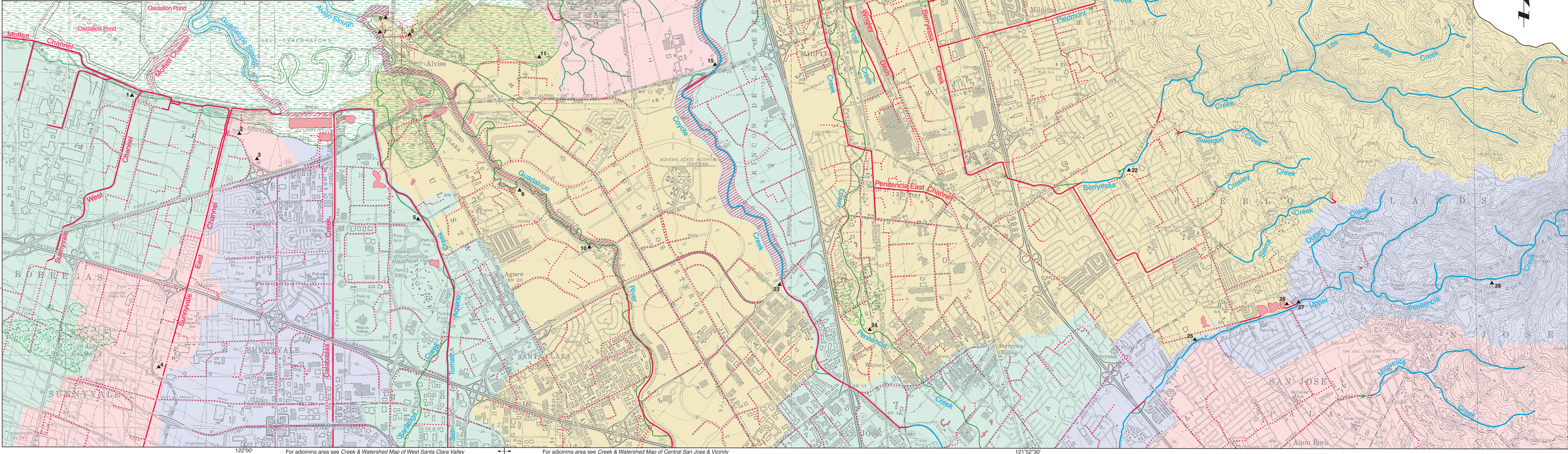
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EXPLANATION

- Creeks
- Former creeks, buried or drained
- Underground culverts & storm drains
- Engineered channels
- Flood control channels ≥ 200 feet wide
- Water spreads over the ground
- Bay or slough
- Tidal marsh, circa 1850
- Now water
- Now filled or drained land
- Willow groves, circa 1850
- Artificial bodies of water
- Present watersheds



For adjoining area see Baylands & Creeks of South San Francisco Bay



For adjoining area see Creek & Watershed Map of Palo Alto & Vicinity

122°00'

For adjoining area see Creek & Watershed Map of West Santa Clara Valley

121°52'30"

37°22'30"