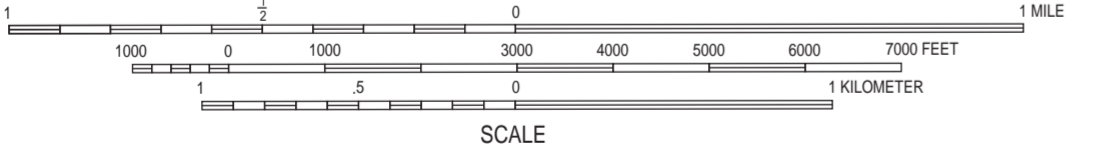


POINTS OF INTEREST

- 1. Coyote Creek Parkway Trailhead.** Coyote Creek Parkway is a paved trail following Coyote Creek for 15 miles from southern San Jose to Morgan Hill. Popular with walkers, bikers, equestrians, and skaters, much of this trail passes through rural scenery. View riparian woodland species such as big leaf maple, cottonwood, sycamore, willow, and coast live oak along the trail. The oaks produce acorns, which were an important source of food to the Native Americans, and still serve many animal species today.
- 2. Anderson Dam Hydroelectric Facility.** Taking advantage of the power of falling water, Santa Clara County Water District (SCVWD) generates electricity at the Anderson Dam Hydroelectric Facility. Water, piped down from the reservoir, runs through the turbines to generate electricity and then flows under the road into Coyote Creek. The power plant, built in 1988, produces clean electricity with zero carbon emissions. PG&E buys the electricity generated by the Anderson Hydroelectric Facility for distribution to its customers.
- 3. Coyote Creek below Anderson Dam.** At the base of the dam, reservoir water pushes into Coyote Creek from an outfall pipe. About 100 yards downstream, the cylindrical metal building with a cone-shaped roof is a gaging station where, between 1904 and 1987, the U.S. Geological Survey recorded creek levels. Signs interpret the dam's history, describing the power of the water when large volumes are discharged. However, prior to the dam's construction, peak flows were even more powerful. The records show winter floods in excess of 3,000 cfs (cubic feet per second) occurred about every two years, with the record flood reaching 26,000 cfs! After dam construction in 1950, floods in excess of 3,000 cfs have occurred about once every ten years and the highest flood has been a mere 7,000 cfs. The dam has effectively reduced flood hazard for downstream areas. However, think how much more dynamic this riverbed was before the dam's construction. Today, remaining sycamores dot the landscape, creating a beautiful setting to favor the streamside serenity.
- 4. Anderson Dam and Reservoir.** Anderson dam, built in 1950, impounds Coyote Creek, the largest stream in the Santa Clara Valley. The dam backs up a deep reservoir, which can store 90,000 acre-feet of water, the largest reservoir in Santa Clara Valley. Like SCVWD's nine other reservoirs built between 1935 and 1957, Anderson Reservoir's major purpose is to store wintertime runoff for groundwater recharge during the dry season. The Coyote Canal takes water from the reservoir northward to recharge ponds in southern San Jose. The reservoir also provides flood protection, recreation, and generates electricity. Take a hike on the Serpentine Trail where you can view the concrete spillway. About once every ten years, heavy winter rains fill the reservoir to overflowing and water cascades down the spillway in a spectacular show. At the opposite end of the dam, hike the trail that leads eastward from the parking lot for a grand view of the watershed.
- 5. Morgan Hill Retention Pond.** This pond retains runoff from the nearby business park and shopping center. During major storms, water can be pumped out of the pond and discharged northward into Fisher Creek. Otherwise, the water from this area flows southward into Butterfield Channel. Hence, the two-color striped pattern on this map representing this watershed. The pond is a popular spot for bird watchers.
- 6. Madrone Channel.** This large man-made channel not only carries stormwater from Morgan Hill but also doubles as a groundwater recharge basin. From the sidewalk on the overpass, view a series of check dams within the channel. These slow the flow of water into the creek, allowing it to soak into the groundwater. To provide even more groundwater recharge, the SCVWD pipes Sacramento-San Joaquin Delta water into the channel at Half Road, one block north.
- 7. San Pedro Ponds Walking Trails.** Stretch your legs or walk the dog on trails winding among the seven percolation ponds at this SCVWD site. The ponds, fed by water piped in from the Sacramento-San Joaquin Delta, recharge groundwater levels. The water that soaks into the ground from these ponds is later withdrawn by local wells. Morgan Hill relies completely on well water for its municipal water supply.
- 8. Butterfield Channel, a "Ditch to Nowhere."** This large channel collects stormwater from an eastern portion of Morgan Hill. Downstream, Llagas Creek cannot accommodate any additional runoff, so the Butterfield Channel stops here at Tomami Avenue. Plans call for building a large retention basin to hold runoff, allowing it to soak into the ground. For now, the channel itself serves as a retention basin.
- 9. Morgan Hill Wildlife Bike Trail.** Hike or bike this recently built paved trail along Little Llagas Creek, a straight, engineered channel that drains northwestern Morgan Hill. The original Little Llagas Creek, shown in green on the map as it appeared on 1939 aerial photographs, was a shallow meandering channel. North of Edmondson, the bike path meanders, reminiscent of the old creek.
- 10. Little Llagas Creek Diversion.** Part of the Llagas Creek Flood-Protection Project, a diversion channel is planned that will re-route most of West Little Llagas Creek into Llagas Creek. At present, the diversion channel stops here at Tomami Avenue. Plans call for building a large retention basin to hold runoff, allowing it to soak into the ground. For now, the channel itself serves as a retention basin.
- 11. Harvey Bear Ranch.** Perched along tiny Center Creek, the old ranch buildings greet hikers and bicyclists at this major trailhead for Coyote Lake-Harvey Bear Ranch County Park. From here, hike up the Willow Springs Trail to follow Center Creek into its headwater canyons. The trail will eventually cross over into the headwaters of New Creek as it rises toward the summit of Coyote Ridge, 1.5 miles from the trailhead.
- 12. Coyote Lake.** Streams carry water and sediment from the hills to the ocean; damming a stream blocks the flow of both. Sediment typically deposits where the stream first enters the lake, forming a broad plain called a delta. From the county park campground, enjoy a beautiful view of the delta of Coyote Creek, Coyote Lake, and the valley below. The delta is valuable wetland and riparian habitat.
- 13. Fish Ladder on Llagas Creek.** Drive the shaded bends of Holes-claw Road and imagine a meandering Llagas Creek beside you (green lines) flowing beneath a canopy of large oaks. Straightened and deepened in 1986 for flood protection, Llagas Creek is now an engineered channel (red line). Visible from the turnout is one of fourteen fish ladders installed in the new channel. Sheelhead jump from pool to pool up the ladders toward upstream spawning grounds. The ladders need periodic removal of gravel and debris from the pools to assure fish passage.
- 14. Las Animas Wetlands Park.** This attractive twenty-three-acre Gilroy city park is a popular spot for community and family recreation. Upper Miller Slough provides a natural backdrop, flowing through the park in a landscaped channel following the original curves of its historical channel. Once fed by the West Branch of Llagas Creek, Upper Miller Slough is a remnant of its former self, fed only by city storm drains. Two footbridges allow viewing. At the western end of the park along Wren Avenue, cattails fill the channel and provide wetland habitat in an urban environment.
- 15. Dennis DeBoll Uvas Creek Preserve.** Uvas Creek drains a large mountainous area of highly erodible rock west of the park. Historically, winter floodwaters washed great quantities of gravel and sand down the creek, depositing them in sheets in the valley. Early maps and photographs of the creek near Santa Teresa Boulevard show a wide, braided channel -- multiple channels dividing and rejoining across freshly deposited gravel and sand -- a pattern typical of Coast Range streams with high-sediment-loads. The green lines on the map show the channel as it appears on 1939 aerial photographs. In 1995, in an effort to improve the creek channel after years of gravel mining, a single meandering channel was constructed, despite the fact that such a channel had not previously existed here. In another reminder that "nature bats last," the next winter's heavy rains washed out this channel and left in its place... a wide, braided channel! Although the project seemed a failure, preparation work that had removed piles of mining debris obstructing the channel gave the creek the space it needed to reshape its bed to its own liking. Hike the levee trail to view this now-typical Coast Range braided stream.
- 16. Christmas Hill Park.** This popular Gilroy city park on Uvas Creek is a good place to view a variety of strategies for handling floodwaters and preventing erosion. Uvas Creek is a wide, gravelly channel, which flows under the road through a row of corrugated steel culverts. If the water is too high, the creek spills over the road, blocking traffic. In a rather unusual arrangement, the tributary creek from Reservoir Canyon flows across the surface of the main parking lot. Look for a gentle V-shaped swale in the concrete: it will be dry most days. After a winter storm, it may be flooded with flowing water. At the downstream end, the water from the parking lot flows down a concrete chute into a channel lined with gabions, wire cages filled with rock. The gabions slow and calm the water, reducing its erosive power before its confluence with Uvas Creek. Enjoy a hike upstream or downstream along the road to see a more natural setting.
- 17. Uvas-Carnadero Creek at Thomas Road.** Near the bridge, large pieces of broken rock, or riprap, armor the banks of the creek to prevent erosion during winter storms. Take the paved bike trail either direction to view natural reaches of this creek shaded by large oaks and other streamside trees. Northward, the trail extends to Santa Teresa Boulevard. The name Carnadero Creek appears on early maps of the creek's downstream reaches. Carnadero, at the southern edge of the map, boasted a railway station and a school in 1876.
- 18. Babbs Creek Park Preserve.** A trail follows the perimeter fence of Babbs Creek Park Preserve, and a footbridge crosses in the middle. View this natural creek from the footbridge. This is a dedicated open space within Gilroy intended to maintain a natural environment for this tributary to Uvas Creek.
- 19. Gilroy Wastewater Treatment Plant.** This modern plant, built in 1990 and operated by the South County Regional Wastewater Authority, treats wastewater from Gilroy and Morgan Hill. The water is recycled either by discharging it to on-site ponds, where it soaks into the groundwater, or by piping it off-site for irrigation or industrial use. Recycled water plays an important role in water conservation here.

EXPLANATION

	Creeks, watershed area ≥ 0.2 km ²		Creeks, buried or drained
	Underground culverts and storm drains ≥ 24" diameter		Water spreads over ground
	Engineered channels		Lakes and ponds
	Engineered channel ≥ 200 ft. wide		Willow grove
	Artificial bodies of water		Freshwater marsh
	Present watersheds, drains to creeks		
	Present watersheds, drains to ground		
	Area of overlapping watersheds (see Point of Interest #5)		



CREEK & WATERSHED MAP of Morgan Hill & Gilroy

By Janet M. Sowers and Jameson E. Henkle, William Lettis & Associates, Inc. Historical wetlands research by the San Francisco Estuary Institute

This map shows the current waterways of the Morgan Hill-Gilroy area, including the creek and storm drain network and present-day watershed boundaries. Also shown are the historical creeks, freshwater marshes, willow groves, and lakes. Many of these historical water features no longer exist. Development of farms, ranches, and cities has resulted in the construction of engineered channels and underground culverts, the draining of marshes, and construction of reservoirs. Many creeks in the flatlands of south Santa Clara Valley have been straightened and channelized to prevent flooding.

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. Engineered channels include both natural creeks significantly reinforced by concrete, rip rap, etc., and artificial channels not coincident with a natural or historical creek.

Accuracy: Every effort was made to produce an accurate map, however, 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, lake, and willow grove boundaries are considered accurate to within 1000 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, 2004 to 2007 aerial photography, and field inspection. The historical locations of creeks were interpreted from 1939 aerial photography, and historical maps. Historical lakes, marshes, and willow groves were compiled by the San Francisco Estuary Institute using historical maps, photographs, and written accounts. 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. We added major new roads and highways.

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Technical assistance was provided by the cities of Morgan Hill and Gilroy, the Santa Clara Valley Water District; the county of Santa Clara. Field and editorial assistance were provided by Christopher Richard and Trish Mulvey. The map was drafted by Jason Holmberg.

Fair Use and Citation Policy: This work is dedicated to the public domain, and we encourage the general public to use the information openly and appropriately. Proper citation for this map is: Sowers, J.M. and Henkle, J.E., 2008, Creek & Watershed Map of Morgan Hill & Gilroy: Oakland Museum of California, Oakland, CA, 1:25,800 scale.

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