CREEK & WATERSHED MAP
of
San Mateo & Vicinity

By Anne C. Tillery, Janet M. Sowers, William Lettis & Associates, Inc. and Sarah Pearce, San Francisco Estuary Institute
Historical wetlands research by the San Francisco Estuary Institute

This map shows the current waterways of the San Mateo area, including the creek and storm drain network and present-day watershed boundaries. Also shown are the historical creeks, tidal marshes, and lakes. Many of these historical water features no longer exist. Urbanization resulted in the construction of underground storm drains and engineered channels, the filling of tidal marshes and the bay, and construction of reservoirs.

Notes: Only larger features are shown. Creeks and engineered channels must have minimum watershed areas of 0.2 square kilometers, and storm drains must have minimum diameters of 24 inches to be included on this map.

Engineered channels include both natural creeks significantly reinforced by concrete or rock, and artificial channels, ditches, and canals not coincident with a historical creek. Some newer engineered channels are designed to mimic natural channels.

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. Historical marsh and lagoon boundaries are considered accurate to within 1000 feet on either side of the line shown. Historical creek locations are accurate to within 200 feet, ephemeral channels to within 500 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 aerial photography, and field inspection. The historical locations of creeks were interpreted from 1943 aerial photography, and 1850-1910 historical maps. Historical tidal marshes and willow groves were researched by San Francisco Estuary Institute using a variety of sources including the U. S. Coast Survey. Complete documentation can be obtained from Anne Tillery or Janet Sowers at William Lettis & Associates, Inc. in Walnut Creek, or www.museumca.org/creeks. The base map showing present geographic features consists of portions of the following U. S. Geological Survey 7.5-minute topographic quadrangles: San Mateo 1993, Montara Mountain (1997) and Redwood Point (1993). We added major new roads and highways.

Financial support was provided by the State Water Resources Control Board through CNPS Pollution Control Grant agreement No. 04-139-552-0 awarded to San Francisco Estuary Institute.

Technical assistance was provided by the cities of Belmont, Burlingame, Foster City, Hillsborough, Millbrae, Redwood City, San Bruno, San Carlos, San Mateo, the County of San Mateo, and by CalTrans. Field and editorial assistance were provided by Christopher Richard. The map was drafted by Jason Holmberg.

PUBLISHED BY:
Oakland Museum of California
1000 Oak Street, Oakland, CA 94607
www.museumca.org/creeks
• 2007 •

William Lettis & Associates, Inc.

EXPLANATION

- Creeks, watershed area ≥ 0.2 km²
- Underground storm drains ≥ 24"
- Engineered channels
- Bay, ocean or natural lakes
- Artificial bodies of water
- Bay fill
- Present watersheds
- Modern tidal marsh formed after ~1850
- Historical tidal marsh, circa 1850, still present

Historical Features, circa 1850

- Creeks, buried or drained, dashed where location uncertain
- Shoreline or marsh boundary
- Ephemeral creek
- Lakes
- Water spreads over the ground
- Willow grove
- Tidal marsh and sloughs
- Now filled land

SCALE
1 0 1 MILE
1000 0 1000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

For adjoining area see Creek & Watershed Map of Daly City & Vicinity

For adjoining area see Creek & Watershed Map of Daly City

37°37'30"

37°30'

122°22'30"

122°12'30"

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

POINTS OF INTEREST

▲**1. Junipero Serra County Park.** This large, 108-acre park set in the foothills of the Santa Cruz Mountains includes the headwaters of El Zanjon, a creek that once flowed through San Bruno. As you cross the creek on the park entrance road, look upstream to see the creek flowing in its natural channel with native streamside vegetation. Downstream, the creek flows in an engineered channel. Notice that despite the fact that it is flowing through the natural setting of a large park, the engineered channel banks lack vegetation.

▲**2. San Bruno City Park.** Tiny El Zanjon (big ditch) flows in a shallow, concrete channel across this large park. Its natural channel replaced during development. Follow the channel behind the swimming pool, along DeSoto Way, and eventually to the children's play structure where the creek disappears into an underground storm drain. Near the baseball diamond, the creek runs through a parking lot where it is shallow enough to drive across. Interestingly, this same trapezoidal, concrete channel can be traced to Junipero Serra Park, about one kilometer upstream.

▲**3. Mosta Grove.** The downstream reaches of Millbrae Creek are hidden underground except for a small glimpse here and there. One of these glimpses is available along the trail at Mosta Grove. Named after Millbrae's sister city in Malta, Mosta Grove has a paved walking path following the historic path of the Millbrae Creek through a giant eucalyptus grove. Although the creek is underground through much of the park, you can catch a glimpse of the creek where it comes in from the street and just before it flows under the ball field.

▲**4. Shorebird Sanctuary.** To see Mills Creek complete its journey to the bay, visit Burlingame's Shorebird Sanctuary at the mouth of the creek. A wheelchair-accessible, paved path takes the visitor right down to the edge of the water and offers fantastic views across the bay. Many species of birds forage in the marsh and on the beach.

▲**5. Mills Canyon Park Open Space.** Mills Canyon is a natural wildlife area in the narrow, wooded canyon of Mills Creek. Lacking developed amenities, this park has a pristine, natural feeling that is hard to get elsewhere in the city. Take a steep, quarter-mile walk on a dirt trail from Adeline down to the bottom of the canyon and view the creek from the footbridge. The loop trail provides a variety of views of the canyon. This is a good place to experience one of our creeks in an upland environment where the channel is narrow and steep. Many creeks in this area have similar headwaters.

▲**6. Heritage Park.** Shaded by redwoods on the banks of Burlingame Creek, Heritage Park offers peaceful creek views in a semi-natural setting. Take the steps down to the creek. Notice the various attempts at erosion control through the years. They include a sacked concrete wall, brick, gravel, and a poured-concrete retaining wall. The root ball of a large tree sits alone in a sand pit.

▲**7. Coyote Point Recreation Area.** Jutting out into the bay, Coyote Point has gone through several iterations as a public space since 1922 when it was developed as the Pacific City Amusement Park. Acquired by the county in 1962, it now provides a wide variety of opportunities for the public including picnicking, swimming, windsurfing, bicycling, fishing, and boating. It has a long sandy beach with warm shallow waters, hallmark eucalyptus groves, steep cliffs on the northeast shore and marshes to the southeast. It offers Bay Area natural history exhibits at the Coyote Point Museum.

▲**8. Ryder Park.** The main ecologic focus of Ryder Park is the mouth of San Mateo Creek entering San Francisco Bay. Beyond the large lawns, carefully landscaped trails, and extensive playground, a large, modern, pedestrian suspension bridge marks the creek mouth. Here, the Shellmound Gurgle is a sculptural monument to the Indian shellmounds that once typified the vicinity and an ingeniously engineered device creatively emphasizing the interaction of the tides with the stream and restored estuary. Riprap (large boulders) along the creek bank and an unnaturally straight channel show that, at this downstream location, San Mateo Creek is entirely engineered.

▲**9. Gateway Park.** San Mateo Creek is the central feature of this manicured city park. Lush lawns, a play structure, and creekside picnic tables offer inviting settings for families. Near the water, creek banks are carefully planted with native vegetation producing a natural look. A lot of engineering went into this reach of San Mateo Creek. Though in its historical channel and seemingly natural along this reach, the channel has been engineered for stability and flood capacity. Look for clues that the channel banks were widened and reinforced with gabions to prevent erosion.

▲**10. Arroyo Court Park.** San Mateo Creek, the largest creek on this map, meanders through this historical campsite of the de Anza expedition. Under the shade of large trees, a short trail leads from the interpretive sign down to benches overlooking a point bar, or inside bend in the creek where sediment deposits. Notice the boards placed on the opposite bank to prevent bank erosion. As often happens, the creek has eroded behind them.

▲**11. Crystal Springs Dam.** Completed in 1890, the dam created Crystal Springs Reservoir, originally filled by the local runoff and later by the Hetch Hetchy aqueduct. From the dam parking area, hike the Sawyer Camp Trail along picturesque Crystal Springs Reservoir and San Andreas Reservoir. Both reservoirs lie astride the San Andreas fault and supply drinking water to San Francisco and Peninsula communities. This park is also home to California's oldest known bay laurel tree, the Jepson Laurel, which is over 600 years old.

▲**12. Gateshead Park.** Enjoy long walks around Foster City along the Bay Trail. On the Belmont Slough side of Foster City, the Bay Trail runs along the slough and marshes, offering excellent bird watching.

▲**13. Redwood Shores Ecological Reserve.** As in other places around the bay, the Bay Trail on the south side of Redwood Shores offers a well-groomed trail extending for long distances along the water's edge. This trail section overlooks Steinberger Slough, a natural feature lined with pickleweed marshes and home to many native birds.

▲**14. Laurelwood Park.** This park in the headwaters of Laurel Creek offers a pleasant area with picnic tables, play structures, and grassy field, and a paved nature trail following the creek. The trail crosses a metal culvert that carries a small tributary then wanders through oak and willow forests. Keep an eye out for evidence, such as exposed tree roots, of recent creek-bank erosion. Just before the end of the trail, the creek leaves the trail and disappears into a pipe under a large grass-covered earthen dam. During wet weather, water backs up behind the dam, protecting the neighborhood below from flooding.

POINTS OF INTEREST (Continued)

▲**15. Pulgas Water Temple.** Built by San Francisco in 1934 to celebrate the bringing of water from the Hetch Hetchy Reservoir to the Bay Area, this landmark is well worth a visit. The temple itself is a stoic circle of fluted columns in the style of ancient Romans whose engineering methods inspired the Hetch Hetchy water system. The serene setting adjoins Crystal Springs Reservoir, where this imported drinking water is stored for San Francisco and many Peninsula communities. The water temple is located about 1.5 miles south of the map's edge along Cañada Road.

▲**16. Water Dog Lake.** Banker William Ralston had this lake built in the 1800s to provide domestic water for his Belmont estate. Located in the heavily wooded canyon of Belmont Creek, the lake is now in a city park within an open space preserve. The trail to the lake is a wide fire road, which takes you through native forests and past views across the bay. Connecting trails are popular for mountain biking.

▲**17. Twin Pines Park.** This large city park offers groomed lawns, picnic areas, and play structures as well as natural areas where you can walk alongside Belmont Creek in the shade of oaks, eucalyptus, and redwood trees. Here, Belmont Creek looks like a mountain stream in its natural environment. From the creek trail, notice the point bars and cut banks that form at the bends of the creek. Point bars occur at the inside of a bend where the sediment deposits. Cut banks occur at the outside of a bend where erosion occurs. Notice the alternating sequence of small pools and riffles, typical in a natural channel. To see a stream reach eroded into bedrock, peek down behind the first play structure. Do you see the same features?

▲**18. Bair Islands Restoration Project.** Originally islands of pickleweed marsh, later partially diked for salt ponds, Bair Islands were once slated for development similar to Foster City. In 1982, Redwood City voters turned down the project in favor of preserving these old marshes. In 1998, the Bair Islands became part of the Don Edwards National Wildlife Refuge. Still largely bounded by levees from their salt-pond days, there are plans to restore the islands to true tidal marshes by breaching the levees and allowing the bay to again ebb and flow over its old haunts. Restoration will also reduce the mosquito population by eliminating stagnant-water breeding sites. A trail from Whipple Avenue (off the map) follows the levee around Inner Bair Island.