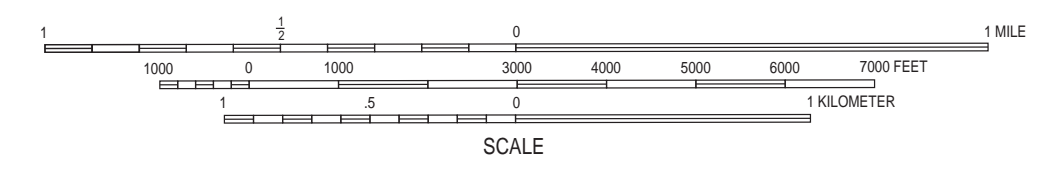


POINTS OF INTEREST

- Arrowhead Marsh (Martin Luther King Jr. Regional Shoreline).** This tidal marsh is formed on the delta of San Leandro Creek (see reverse side). Although small, it is located along the Pacific flyway and many migratory birds stop here to feed. Take the boardwalk for a good look at native marsh vegetation including pickleweed and cordgrass. Compare this original marsh to the 1998 restored marsh stretching south from the parking lot.
- Root Park.** Access to San Leandro Creek in downtown San Leandro was created in 1996 with the construction of a viewing platform and walkway that leads to the creek. This tiny park provides a shady haven amidst the urban bustle.
- Chabot Park.** This shady park is along a natural bend of San Leandro Creek, just below the Lake Chabot dam. Steelhead trout once spawned in this stretch of creek. To this day, there are occasional reports of large trout appearing here, especially in wetter years.
- Anthony Chabot Regional Park.** Anthony Chabot built this dam and reservoir on San Leandro Creek in 1874-76 to provide drinking water for the City of Oakland. The dam, located at the west end of the reservoir, is earth-fill construction with a clay core that was built up of layers compacted by teams of horses.
- Grass Valley.** Along this creek observe the interaction of geological and biological processes in the creek bed. The moist soil near the stream allows large trees to grow. But, during floods, creek bank erosion can undermine the roots of these trees causing them to fall into the creek bed. The log-dammed pools then provide good habitat for fish and other aquatic animals.
- San Leandro Shoreline Trail.** From the San Leandro Marina, walk south on the San Leandro Shoreline Trail, cross the Estuillo Canal, and pass the golf course built over former marshlands to reach the San Leandro Shoreline Marshlands (0.8 mi). You are walking on a dike that cut off this portion of the original marshlands from tidal flows. Tidal flow is now restored to 300 acres in a major marsh reconstruction project. Continue on to the Lewelling Boulevard entrance (1.7 mi).
- Fairmont Hospital Springs.** Prior to 1868, a spring, known to the rancheros as derramaderos (overflow), was located near the present hospital site along the Hayward fault. To solve an ownership dispute between Don Estuillo on the north and Don Castro on the south, the governor of Mexico designated the spring as Indian land. The hospital now stands upon the site of the Indian village. An earthquake in 1868 shut off the flow of water, but there are still many small seeps in this neighborhood.
- Meek Park.** The Meeks built their estate along San Lorenzo Creek in 1868 and planted the grounds in orchards. Here Mr. Bing, Meek's Chinese orchardist, developed his famous cherry. The concrete channel of San Lorenzo Creek behind the estate was built in 1962 as a federal flood control project. What a lovely background the original creek must have been!
- Cull Canyon Regional Recreation Area.** Cull Creek was dammed in 1963 to control flooding downstream. The creek now deposits its sediment in the reservoir. The sediment must be periodically removed to maintain flood storage capacity.
- Bay Trees Park.** Park at the lower lot to view the junction of Crow Creek and Cull Creek. Both flow in concrete channels here. Note that the far channel, Crow Creek, is floored with sand and debris deposited by the creek during high flows, whereas the Cull Creek channel is fairly clean. The sediment of Cull Creek is caught by the reservoir upstream. Walk upstream past the picnic area to see the dam spillway.
- Castro Valley Creek Restoration.** This 600-ft reach was one of the few remaining natural reaches of Castro Valley Creek, but bank erosion threatened the businesses on either side. In 1994 the County of Alameda chose a unique approach and stabilized the banks with crib walls of redwood timbers. These walls have allowed streamside vegetation to grow and animal habitat to be maintained. Downstream toward the new Castro Valley library, boulders stabilizing the creek banks mark a more recent project, completed in 2009. Here, the county uncovered a 300-ft culverted reach, constructed a new channel, and planted it with native species.
- Carlos Bee Park.** Enjoy a shady stroll along Chabot Creek at this narrow park tucked between the creek and the hillside. The creek, here freed of its artificial confines, rushes over bedrock cascades through a shady gulch. At the eastern end of the park the trail descends to the water.
- De Anza Park.** Spanish explorers who camped here on the banks of San Lorenzo Creek in the late 1700s found a reliable water source lined with alders, cottonwoods, and willows. Climb down the steps beneath a canopy of mature trees to view the creek. This is the final natural reach of the creek before it flows under Foothill Boulevard and into a concrete channel built in 1954 for flood control.
- Sulphur Creek Diversion.** From its beginnings in 1852, downtown Hayward was frequently flooded by storm waters of Sulphur Creek. Culverting of the creek in the 1920s alleviated some of the problem. Then, in 1962, the County of Alameda rerouted the creek into San Lorenzo Creek at 2nd Street. Now only the highest

flows spill into the original Sulphur Creek bed.

- Sulphur Creek Nature Center.** Sulphur Creek is named for the sulfur-rich spring that feeds into this creek. Visit the nature center for live animals, educational displays, and a lovely creek to enjoy.
- Memorial Park.** This is the downstream trailhead for a beautiful 3-mile loop up Ward Creek to East Avenue Park, along the ridge, returning down the south fork of Ward Creek.
- Oro Loma Marsh (Hayward Regional Shoreline).** From the end of Grant Ave, walk the trail west, then south past the wastewater treatment plant and across the Bockman Canal (0.5 mi). Oro Loma Marsh is a portion of the original mile-wide wetlands that stretched from the San Mateo Bridge to the San Leandro Marina. These wetlands contained both tidal marshes and ponds, such as Crystal Salt Pond. Tidal flow, for decades blocked by dikes like the one you are walking on, was restored in 1998 by breaching this dike and another to the east. To see the breach and watch the tides come in and out, continue south 0.4 mi past the Bockman Canal.
- Cogswell Marsh (Hayward Regional Shoreline).** From the end of Winton Avenue walk south on the Hayward Shoreline Trail. Past Mt. Trashmore, a landfill, you will see tidal marshlands that were once diked for salt evaporation ponds, but now are restored. In Cogswell marsh (0.5 mi) artificial islands provide refuge and nesting sites for shorebirds and salt marsh harvest mice. For maps and information on wildlife, continue south to the Hayward Shoreline Interpretive Center on Breakwater Ave (2.6 mi).
- Hayward Marsh.** This former salt pond has been restored to a brackish water tidal marsh. Its fresh water source is clean, treated sewage effluent from the City of Hayward.
- Garin & Dry Creek Pioneer Regional Parks.** Trails lead up Dry Creek, cross the ridge, then drop down into the canyon of Zelle Creek to Garin Woods (4-mile loop). Both creeks are in fairly natural condition here in the hills, but flow into storm drains and canals across the flatlands. Two small ponds, the Newt Pond (0.4 mi) and Jordan Pond (0.3 mi) were created by damming Dry Creek.



CREEK & WATERSHED MAP of Hayward & San Leandro

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

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

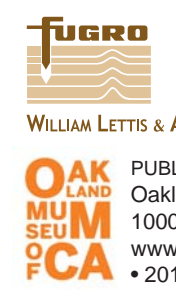
Notes: Only larger features are shown. Creeks and engineered channels have a minimum of 0.2 square kilometers of watershed, and storm drains measure at least 24 inches in diameter.

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. Where the entire creek flow is carried by a culvert buried in a former creek bed, only the culvert symbol (red dots) is shown on the map.

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 shoreline and tidal marsh boundaries are considered accurate to within 200 feet on either side of the line shown, as are those willow groves enclosed by a line. Unenclosed willow groves are accurate to within 2,000 feet in location and 50% in size. Former creek locations are accurate to within 200 feet, or if dashed, to within 500 feet on either side of the line shown. Present-day creek and storm drain locations are considered accurate to within 100 feet on either side of the line shown. For more information on local creeks and watersheds, see the "Guide to San Francisco Bay Area Creeks" on the Oakland Museum of California web site at: www.museumca.org

How this map was made: Storm drains, engineered channels, and present-day creeks were compiled from city and county maps, 2005-2009 aerial photography, and field inspection. The locations of creeks circa 1850 were reconstructed from historical maps, city creek and sewer maps, and from interpretation of topography. The historical shoreline, tidal marshes, ponds, sloughs, and willow groves were compiled with the assistance of the Historical Ecology Project of the San Francisco Estuary Institute (SFEI) of Richmond, CA, using 1850s U.S. Coast Survey maps, early Spanish and American maps and written accounts. Complete documentation can be obtained from Janet Sowers at Fugro William Lettis & Associates, Inc. in Walnut Creek, or Christopher Richard of the Oakland Museum of California. The base map (showing present geographic features) was prepared in 1980 by the U.S. Geological Survey. We added major new roads.



Major financial support was provided by the Alameda County Urban Runoff Clean Water Program, Oakland Museum of California, and Fugro William Lettis & Associates (FWLA), Inc. Information and assistance was provided by the Cities of Oakland, San Leandro, and Hayward, the County of Alameda, East Bay Regional Park District, and Hayward Area Regional Park District. Computer drafting by Jason Holmberg of FWLA.

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EXPLANATION	
	Creeks, watershed area ≥ 0.2 km ²
	Underground culverts and storm drains ≥ 24" diameter
	Engineered channels
	Artificial bodies of water
	Present watersheds
	Bay fill
	Modern tidal marsh formed after ~1850
<i>Historical Features 1800-1900</i>	
	Creeks, buried or drained, dashed where location uncertain
	Shoreline or marsh boundary
	Water spreads over ground
	Lakes and ponds
	Tidal marsh and sloughs
	Willow grove

