

## A Cultural and Natural History of the San Pablo Creek Watershed

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Prepared by The Watershed Project (previously known as the Aquatic Outreach Institute)

*Note: This booklet focuses on the watershed from the San Pablo Dam and reservoir westward (downstream). For a history of the Orinda area, see Muir Sorricks's *The History of Orinda*, published by the Orinda Library Board in 1970. Orinda also has an active creek stewardship group, the Friends of Orinda Creeks, which has conducted several watershed outreach efforts in local schools (see [www.ci.orinda.ca.us/orindaway.htm](http://www.ci.orinda.ca.us/orindaway.htm)). This booklet was written as part of the Aquatic Outreach Institute's efforts to develop stewardship of the mid- to lower watershed.*

The San Pablo Creek watershed is a wealthy one-rich in history, culture, and natural resources. The early native American inhabitants of the watershed drank from this deep and powerful creek and caught the steelhead that swam in its waters. They ate the tubers and roots of the plants that grew in the fertile soils deposited by the creek, and buried their artifacts, the shells and bones of the creatures they ate, and even their own dead along its banks. Later, European settlers grew fruit, grain, and vegetables in the same rich soils and watered cattle in the creek. Even today, residents of the San Pablo Creek watershed rely on the creek, perhaps unknowingly: its waters quench the thirst and meet the household needs of about 10 percent of the East Bay Municipal Utility District's customers. Some residents rely on the creek in another way, though-as a reminder that something wild and self-sufficient flows through their midst, offering respite from the surrounding urbanized landscape. Wildlife, too, rely on the creek, nesting and foraging along its banks and using its riparian corridor to move throughout the watershed. And just as they have done for centuries, steelhead swim up the creek-even through urban San Pablo-until they reach San Pablo Dam.

The San Pablo Creek watershed is one of the largest and most geographically diverse in the East Bay, draining 41 square miles and ranging from near-pristine oak woodlands in portions of the upper watershed to the suburbanized and urbanized lands above and below San Pablo Dam. San Pablo Creek originates in two small tributaries: one begins just north of the city of Orinda near Rheem Boulevard and flows south to join the other, which flows north from Sibley Roundtop Peak, a dormant volcano. The creek then flows through Orinda, where it enters a culvert beneath the downtown area, passes under Highway 24, and eventually comes above ground again to continue its northwesterly journey alongside San Pablo Dam Road. There it is joined by Lauterwasser Creek and Bear Creek and several

smaller tributaries, before flowing into the reservoir formed by San Pablo Dam. Bear Creek, named after a 1,000-pound bear killed on its banks by Ramone Briones, was also dammed, to create Briones Reservoir.

At San Pablo Dam, the creek drains 23.37 square miles, or slightly over half of the entire watershed. Below the dam, from both north and south of San Pablo Dam Road, more tributaries flow into the creek as it meanders through semi-rural El Sobrante, providing a soothing contrast to the rapid pace of San Pablo Dam Road traffic. Before it reaches I-80, the creek disappears into a culvert, although you can follow its underground course by following the line of riparian vegetation visible from places like Mattingly's Top Soil on San Pablo Dam Road. After flowing beneath the freeway, the creek comes above ground again in the still-rural setting of St. Joseph's Cemetery, in the city of San Pablo. It then flows openly through San Pablo, paralleling Wildcat Creek for much of its length, and finally through North Richmond before entering the Bay. The tiny city of San Pablo-only 2.6 square miles-is one of the only East Bay cities to have two such major streams flowing openly through it. San Pablo also has two other creeks, Rheem Creek and another small, unnamed stream to the north.

In some parts of San Pablo, the largest creeks-Wildcat and San Pablo-course across the landscape less than 500 feet apart, framing the city between their dark ribbons of vegetation. Early maps depict a lagoon or freshwater lake between the two creeks as they neared the Bay, with the creeks forming one channel before flowing westward through marshland into San Pablo Bay. Today they flow separately into the Bay, San Pablo Creek to the north of Wildcat. This new pattern may be a result of the creek changing its own course naturally, but it may also be the result of human activities during the late 1800s (discussed later in this booklet).

N. C. Nelson, a University of California Berkeley archaeologist, reported in a 1910 paper about the shellmounds in Richmond that "old-timers" in San Pablo remembered the entire western part of the city being occupied by the lagoon between the two creeks, which occasionally flooded the entire town. They even recalled some ranchers taking refuge during high water on a shellmound on San Pablo Creek's south bank, at the edge of the lagoon. The lagoon was probably seasonal, forming in wet winters and shrinking or evaporating during the summer months. While flooding is not generally a problem along San Pablo Creek today, the low-lying land (near the railroad tracks along Giant Highway) can flood in heavy storms if the culverts carrying the creek beneath the tracks back up.

As it reaches the Bay, San Pablo Creek flows into 300-acre San Pablo Creek Marsh, home to endangered species such as the California clapper rail and the salt marsh harvest mouse, the threatened and highly secretive black rail, and the salt marsh wandering shrew and San Pablo vole, both species of concern. Another secretive bird, the salt marsh song sparrow, sings from the edges of the marsh's sloughs, while salt marsh yellow-throats flit among the willows and rushes where the creek transitions from fresh to salt water.

### The Early Watershed and Its Inhabitants

Just a few hundred years ago, the San Pablo Creek area was a very different place. Moist grasslands and meadows covered much of what is now Richmond and San Pablo. Seeps and springs flowed year-round, providing habitat for Pacific chorus frogs, red-legged frogs, California newts, and other amphibians, which preyed upon the bright dragonflies that hovered nearby. Vernal pools, with their concentric rings of wildflowers, appeared and disappeared, according to the season. Colorful butterflies like the California sister and painted lady visited those wildflowers and sipped their nectar, in turn helping the plants disperse pollen. Everywhere there was movement and sound: the buzzing of insects, the rustling of snakes in the grasses, dry leaves cracking and dropping from the oaks, the buds of ceanothus popping, and the raucous calls of flickers and scrub jays as they flew from tree to tree. Coast live oaks dotted the landscape, supporting entire ecosystems within their canopies. Oak titmice, bushtits, and other native insectivorous birds foraged on insects in the oaks, while jays, woodpeckers, gray squirrels, and mule deer pilfered the acorns. The thickest tree growth was along the creeks, their banks lined with alders, box elders, sycamores, buckeyes, and big-leaf maples. San Pablo Creek was the largest, deepest creek. It coursed across the landscape, its flows swift and strong, unaltered by dams or other impediments.

Tule elk, black-tailed deer, pronghorn antelope, coyotes, gray foxes, bobcats, and grizzly and black bears roamed the grass-covered hills and plains and drank from the clear waters of San Pablo Creek. Meadowlarks warbled their melodic songs from within the fields, their yellow and black-chevroned breasts glinting in the sun against the bright poppies and lupines. Hidden in the lush meadows, small mammals raised their young, among them gray squirrels, ground squirrels, and brush rabbits, their remains discovered over a century later in prehistoric middens, or shellmounds. Other mammals traveled along the creek at night-raccoons, striped skunks, minks, and weasels. Today, raccoons and

skunks are present throughout the watershed while minks and weasels are restricted to the more pristine upper reaches, and there are fewer native gray squirrels and gray foxes than the non-native fox squirrels and red foxes.

The first human residents of the area were discovered by Spanish explorers Pedro Fages and Juan Crespi in 1772. But the first to describe them in any detail were Captain Juan Bautista de Anza and Father Pedro Font, who rode through the San Pablo area in April 1776. Coming upon a village in the vicinity of today's San Pablo Avenue at San Pablo Dam Road, they saw several men hunting along the creek and women gathering herbs and roots. They estimated that the village consisted of about 100 Native Americans and described the creek as having a very deep bed with a "heavy growth of live oaks, sycamores, and other trees." The travelers offered the people of the village some glass beads and in return were presented with a feast of roasted cacomites (a species of iris).

The people the Spanish found here were Ohlone Indians, most likely of the Huchiun clan, a group that lived throughout the East Bay flatlands, roughly between Pinole and Oakland. They drank from San Pablo Creek, using its waters to leach tannins from the acorns of coast live oaks, which they ground into a nourishing gruel, and stalked the plentiful salmon that spawned in the creek's gravels. While the Huchiuns probably dammed the creek temporarily to catch their fish, they did not permanently alter the creek's flows or prevent fish from swimming and spawning upstream. Their overall impact on the stream was negligible. Huchiuns living closer to the Bay caught mussels, California oysters, seabirds like cormorants and grebes, and sea otters, seals, and sea lions. Occasionally, they would feast on a whale that had washed ashore. They traded the diverse foods they found in the estuary for the goods of other clans who lived farther inland.

Where the creek transitions from fresh to saltwater marsh as it enters the Bay, the Huchiuns caught songbirds and shorebirds in carefully hidden nets. They harvested tules, cattails, willows, and sedges, which they used for weaving over 15 different types of baskets, boats to fish in, and even huts to live in. Beneath the cordgrass, saltgrass, and pickleweed of the salt marsh, they found bent-nosed clams and snails and within the tidal channels caught sturgeon, bat rays, thresher sharks, and leopard sharks. They may have also fished for white sea bass and porpoise in deeper waters. In addition to these sources of protein, the Huchiuns ate the seeds of California buttercup, blue wild rye, creeping wild rye, farewell-to-spring (*clarkia*), and chia, an upright blue flower with grayish leaves. The small, flat, brown seeds of

chia are tasty and nutritious and are used even today by Native Americans to treat diabetes. The greens of wild clover, lupine, miner's lettuce, columbine, and spindleroot were eaten raw or steamed. Soap root flourished in the fields near the creek, and the women would dig up its bulbs with sharp sticks and roast them over hot coals. Many of these plants still grow in parts of the watershed, often hidden among introduced grasses and weeds. And hidden beneath the apartments, homes, churches, and parking lots along the creek throughout the city of San Pablo is another tie to the past: the numerous shellmounds of the people who once lived and thrived here.

The middle and upper watershed, too, were first inhabited by Ohlone Indians although it is uncertain whether they were of the Huchiun or Saclan clans. They relied on the creek in much the same ways the Huchiuns in the lower watershed did, and possibly more so since they did not have easy access to the estuary and its bountiful resources. As early as 1810, Spanish priests had relocated most of the indigenous people in the El Sobrante area to Mission San Jose. Although little is known about these people, when San Pablo Dam was rebuilt in the late 1970s, many of their cultural deposits were unearthed and still await further study. Over 2,000 acres in the upper watershed have been identified as a sensitive archaeological zone, and the San Pablo Dam/reservoir area has the largest number of known archaeological sites of all of the East Bay M.U.D. reservoirs.

### The Rancho Period

#### Rancho San Pablo (Lower Watershed)

Sometime between 1813 and 1817, the Spanish priests who had established San Francisco's Mission Dolores founded an outpost in San Pablo, where they grazed sheep and grew crops. During this time, many of the Huchiuns were moved to Mission Dolores and forced to live in exile, allowed to return to their homeland only twice a year. In 1823, after Mexico took possession of California from Spain, the Mexican government formally awarded the Huchiun land to Francisco Castro for his service in the Mexican army, and the Mission Dolores priests surrendered the land to him. Castro retained some of the Huchiuns to work on his rancho, but by this time, the tribe had been destroyed as an organized group. In 1852, an agent of the United States Government discovered 78 Native Americans working on Castro's rancho. In poor health (they had no immunity to diseases introduced by the Europeans), these native Americans were probably the last of the San Pablo-area Huchiuns.

"Rancho San Pablo," as Castro named his land, was 90 square kilometers, from Cerrito Creek in El Cerrito to the south, to Pinole Creek to the north, and east to the present-day towns of El Sobrante and Lafayette. The early Mexican settlers used Rancho San Pablo primarily for grazing their herds of cattle, which they watered in the creeks or the springs adjacent to San Pablo, Wildcat, and other local creeks. Like the Huchiuns, Francisco Castro recognized the importance of living near abundant sources of fresh water, building his family's first adobe on Wildcat Creek (near today's Riverside School in Richmond). After Castro died, that adobe began to deteriorate, so his sons built a new one for their mother between Wildcat and San Pablo Creeks near San Pablo Avenue and Church Lane in San Pablo. Most of Castro's sons built their own homes nearby, between the two creeks, although Victor built his farther south, on the banks of Cerrito Creek in El Cerrito.

In 1839, Castro's oldest daughter, Maria Martina Alexandra, married Juan Bautista Alvarado, a native Californian and the governor of California, and moved to Monterey to live with him in the governor's mansion. In 1848, after the United States acquired California as a result of the Mexican War and the Treaty of Guadalupe Hidalgo, Maria and Juan Bautista moved back to San Pablo to live with their six children (and Maria's mother) in the family adobe at Church and San Pablo Avenues. Not surprisingly, some of the other family members quickly moved out! The Alvarados planted a six-acre orchard of fruit trees on the land between the creeks.

By this time, however, much of the family's land had been sold to or taken over by other European settlers. Castro had died in 1831, and the manner in which he had divided up his land among his heirs led to considerable confusion. In 1852, his son Joaquin attempted to verify family ownership of the rancho through a commission established by the United States Government. Title was not cleared until 1894, and in the intervening years many newcomers settled on the rancho land, often acquiring property through questionable means. Other parcels were acquired legally-although very cheaply-as the Castros were forced to sell off their land to pay legal fees.

#### Rancho El Sobrante (Mid-Upper Watershed)

Rancho El Sobrante came into being when Francisco's sons Juan Jose and Victor petitioned the Mexican government for 22,000 acres, most of which they received in 1841 from Governor Juan Bautista (their brother-in-law). The boundaries of this rancho were to be determined by the boundaries of the surrounding land grants-Ranchos San Antonio, San Pablo, El Pinole, La Boca de la Ca-ada del

Pinole, Acalanes, and La Laguna de los Palos Colorados. This sobrante or "surplus" land encompassed an area along both sides of San Pablo Creek, from Castro Creek to the west to just beyond Lauterwasser Creek to the east (both are tributaries to San Pablo Creek). Because the boundaries of the rancho were not very exact, however, the land grant was never formally approved.

The Castro brothers nonetheless began grazing cattle on the land in El Sobrante, which they visited from their homes in San Pablo. A few Native Americans remained in the area and worked on the rancho, but they succumbed to pneumonia in 1850. Around this same time, European settlers arrived and began squatting on the land and stealing the Castros' cattle. The Castros hired a lawyer named Horace Carpentier to represent them, but he swindled them out of much of their land (a few years later, Carpentier became the first mayor of Oakland). The Castros did successfully sell much of their land to the San Francisco real estate firm of Ward and Smith. That property ran alongside San Pablo Creek from Bear Creek to the easternmost boundary of the rancho-today's Orinda. After almost 30 years of litigation, the Castros ended up with only about 781 acres of what was originally a 17,000-acre land grant. Until recently, some members of the family still lived along Castro Creek, on Castro Ranch Road.

#### From Ranchos to Farms

In the lower watershed, two early European settlers who came to own much of the land between San Pablo and Wildcat Creeks were John Davis and Jacob Tewksbury. Davis, who was born in Dalmatia (western Yugoslavia) in 1825, was an unsuccessful goldminer who opened up a restaurant and lodging house on Commercial Street in San Francisco in 1850. In 1851, he moved to San Pablo and bought more than 400 acres from the Castro family. Davis's farm extended from where the Southern Pacific railroad tracks now are almost to the intersection of San Pablo Avenue and Road 20, near San Pablo Creek. Davis raised six children with his wife Anna, who was from Scotland. Over a century later, his grandchildren donated a portion of the land they inherited from him to the city of San Pablo. That land became Davis Park, through which Wildcat Creek flows today.

Jacob Tewksbury was a retired doctor who came to Contra Costa County from South America in the 1850s and bought many acres of land in Rancho San Pablo along and between San Pablo and Wildcat Creeks. Tewksbury was retired but was hired at one point by Joaquin Castro to care for his ailing mother. Tewksbury spent most of his time in San Francisco and leased much of his land to farmers.

He built a house close to San Pablo Creek beneath a huge pepper tree just off of San Pablo Dam Road, not too far from where it forks off of San Pablo Avenue. Tewksbury, who owned much of Potrero San Pablo-the hilly land we now identify as Point Richmond, stretching through the town of Point Richmond and Chevron's tank farm-transformed the potrero from an island into a peninsula. Tewksbury built dams at both ends of the marshy but navigable channel separating the island from the mainland: one near the mouth of San Pablo Creek and the other at Ellis Landing (near the foot of 11th Street in Richmond). Over time, as silt washed over the marsh and was deposited, the channel and its sloughs were filled in. By 1872, the government had declared the potrero a peninsula, and Tewksbury added some of the land connecting the potrero to the mainland to his extensive holdings. Later, the city of Richmond built on top of this once-marshy ground. It is possible that Tewksbury's activities also helped change the natural course of San Pablo Creek.

Many Germans settled in the lower watershed in the mid-1800s, among them Frederick Wolf, who had a ranch on the north bank of San Pablo Creek across from Tewksbury's home along what is now El Portal Drive, just east of the bridge leading into St. Joseph's Cemetery at Fordham Drive. In the 1950s and 1960s, this was the site of the Chalet Hamburger Stand. Another German who settled along the creek was Charles Wilkie, who had a farm on a tributary of San Pablo Creek (near May Road and San Pablo Dam Road) that is still known as Wilkie Creek.

Many settlers came from the Azores Islands on whaling ships. These Portuguese immigrants bought land along the creek and grew grain, barley, onions, and potatoes in its rich soil. Others planted small orchards of pears, cherries, almonds, and oranges, which thrived in San Pablo's sunny climate. Some became dairy farmers and watered their cattle from the creek or, with the help of windmills and wells, pumped groundwater from the high water table near the creek. Almost every farm had a windmill and a water tower: some of the windmills can still be seen today in urban backyards (such as the one at 2255 Brookhaven Court).

The Aguiar brothers planted acres of sugar beets along San Pablo Creek, near today's El Portal shopping district. Manual Machado built a home along San Pablo Creek at 2022 Road 20, which he used as a guest house for travelers on their way to San Francisco. Today this historic house is known as the Stanley Alter home, named for one of San Pablo's early city councilmen who purchased the house in 1948. Bernardo Andrata, also from Portugal, built a home along lower San Pablo Creek at 918

Randy Lane, on land purchased from Henri Emeric. Emeric was a former state Fish and Game Commissioner who had become one of the largest property owners in the area after suing the Alvarado/Castro family over title to their land.

Like many buildings in San Pablo, Andrata's home was constructed on the remains of one of the Native American shellmounds along the creek. (Visiting the home today, you can see that it stands on a small hill. ) Andrata later sold his home to the Luiz family, who operated a dairy nearby. During the Depression, the Luiz family sold their business and their herd. Later, another farmer grew rhubarb on the former dairy land, and until recently, lettuce was still grown here!

Another historic home that still stands along the creek was built by Azro Rumrill in 1884, at 930 Road 20. Rumrill, from Vermont, was a farmer, school trustee, and justice of the peace in San Pablo, where he began a construction business. Rumrill Boulevard is named after him. Rumrill's daughter eventually lived in the house with her husband Walter Helms. Helms was the first Richmond School District Superintendent, and helped establish an educational system in San Pablo. Helms Middle School, which backs onto San Pablo Creek, is named in his honor.

The westernmost land along San Pablo Creek between San Pablo and Wildcat Creeks was owned by another Portuguese settler, Candido Gutierrez. In 1850, Gutierrez built an adobe along San Pablo Creek's south bank, near the end of present-day Brookside Drive, west of the Southern Pacific tracks. This adobe was known as one of the finest mansions of its day. Candido and Jovita, his wife, shipped farm goods off to San Francisco and received supplies literally at their back door, as schooners were able to sail that far up lower San Pablo Creek in those days. The adobe was razed in 1946.

Across the creek from Gutierrez, two entrepreneurs from Martinez who are known only as "Fish and Blum" purchased over 300 acres, on which they grew grain. They built a 60-foot-long bridge across the creek, which an April 1895 issue of the San Pablo News praised as a "model of beauty and permanency." (That same issue of the paper mentioned that a fisherman named William Donnelly had recently caught a four-pound "trout" in the creek.) Fish and Blum operated several warehouses on the Bay north of the creek. These warehouses and a 300-foot wharf were one of three main points along the Bay used for shipping grain and other farm products to San Francisco before the Southern Pacific Railroad was built in 1879 (the other two shipping points were Ellis Landing and Point Isabel). The warehouses were built in the early 1850s by Captain Cruz, who lived in a dwelling near the wharf with

his family. No trace of what was known as Cruz Landing remains today. When Fish and Blum's warehouses were torn down, the lumber was reused to build a large barn that was later used by the Luiz Dairy.

One of the more illustrious landowners in the lower watershed was Theodore Hittell, an attorney and historian from Pennsylvania, who represented Emeric in his 1868-1895 lawsuit against the Alvarado/Castro family. Winning this lawsuit made Hittell an eminent attorney. Hittell was also well known for his not-so-brief (four-volume) *Brief History of California*, which he completed in 1898. Many of the early settlers in San Pablo were Catholic, and in 1864, St. Paul's Church was built on Church Lane near Wildcat Creek, on land donated by the Alvarado/Castro family. For years, the community's social activities centered around this church. The church still exists today, although it was rebuilt in 1931. San Pablo's first Protestant church, the First Baptist Church, was built in 1863 near the corner of Vale Road and San Pablo Avenue, and members were baptized in nearby San Pablo and Wildcat Creeks. San Pablo Creek was sometimes dammed for these baptisms near Wolf Ranch, across from Fred Blume's farm (today's St. Joseph's Cemetery). Blume was one of the five sons of German immigrants Henry and Fredericka Blume, who owned the land on which Hilltop Mall was built. Fred Blume farmed the land along San Pablo Creek, pumping water from a well on the creek's banks, and using a system of wooden pipes to take the water out across his fields. In 1914, he sold and donated his land to St. Joseph's Cemetery, and this area remains an oasis, just seconds from the glare and blur of San Pablo Avenue and its fast food restaurants, mobile home parks, and shopping strips.

When the property changed hands, a cartographer drew a topographic map of Blume's land for St. Joseph's. San Pablo Creek meanders across the map, bordered by rows of willows and eucalyptus. The map shows a seventy-five-foot-deep well, windmill, and water tank on the creek's south bank. Blume also had two barns, an orchard, several cottages (one of which is still standing), and a house on his property. Even today you can get a sense of what this area was like as a farm. If you travel down Vale Road (take a right off San Pablo Avenue if you are traveling north), just before you reach Ridge Road, you will find a small ephemeral stream behind a white wooden fence off to your right. Although it does not appear on any contemporary city maps, this charming little stream (possibly a tributary of San Pablo Creek at one time) can be seen on some of the old maps, flowing westerly and then disappearing into Blume's fields. Turn left on Ridge Road and look out across the fields-it is easy to picture Blume's farm. In exceptionally wet winters a bog formed in this low-lying area, with enough water for people to

boat in!

The land on the eastern side of Blume's property is noted on the cemetery's map as "rough sliding ground" (just west of Highway 80 today), which is not surprising since a trace of the Hayward Fault runs through here. In the late 1800s, the California and Nevada Railroad, a wood-burning, narrow-gauge railroad, ran through here before turning and following alongside the creek parallel to what is now San Pablo Dam Road. In the early 1900s, after the railroad's demise (it operated for less than 10 years), People's Water Company built a tiny reservoir on top of the old railroad cut (behind today's mausoleum). When I-80 was put through the area in the 1950s, the hilly land (which was part of what was then known as Tewksbury Hill) behind the mausoleum was flattened, the old reservoir demolished, and a larger one built closer to the building. That reservoir survived into the 1980s, when it had to be demolished after it began to leak (likely due to improper grading and unstable soils). The reservoir and the wells on the property supplied the cemetery with water for years. In fact, the cemetery still gets all of its water from a well, much as Fred Blume did in the 1800s, courtesy of the high water table-the "underground" watershed.

San Pablo remained a community of small ranches and farms into the early 1930s, although many of its male residents had begun working in the various manufacturing industries cropping up along the Bay. In 1901, Pacific Coast Oil Company (later Standard Oil) built a refinery on Potrero San Pablo, and by 1920, many men were either working there, for the Southern Pacific railroad, at one of the many powder works (munitions factories) along San Pablo Bay, or at Richmond's brick factory. Chinese settlers, who had come to the area after helping build the transcontinental railroads, worked in shrimp camps along San Pablo Bay and in the powder works, where they were given the most dangerous jobs and paid the lowest wages. As San Pablo's population began to grow, some of the farms were sold and subdivided and replaced by housing tracts. But several remained, yielding rhubarb, celery, lettuce, cauliflower, cabbage, sugar beets, and other "truck crops."

Like San Pablo, El Sobrante remained quite rural well into the twentieth century. Just as the Mexican rancheros did, the Europeans who settled in the El Sobrante area used the land to graze beef and dairy cows and to grow grain and vegetables. Each farm survived by growing its own vegetable garden, raising chickens, and cows, and keeping horses for traveling to town (San Pablo). The ranchers, farmers, and their visitors also hunted and fished along San Pablo Creek. California quail were so

abundant that thousands could be seen at a time, according to an 1895 Contra Costa Gazette. Residents claimed they could carry a pitchfork into the creek and catch salmon weighing 20 pounds or more. Soren Peterson Skow, who had immigrated from Denmark, started a dairy located near the downstream end of today's San Pablo Dam (Skow Canyon is named for him). Although the Skow Dairy was later relocated to San Pablo Dam Road and Clark Road when the dam was built, it operated (eventually as the Richmond Farm Creamery) in El Sobrante until 1955, delivering milk from Pinole to Point Richmond.

As late as 1899, farmers and ranchers in the El Sobrante Valley still owned large parcels of land, ranging from 80 to 200 acres. Herman Sandow purchased approximately 200 acres of the Ward and Smith parcel that extended along San Pablo Creek between Bear Creek and Orinda. His daughter Ida married General Theodore Wagner, the U.S. Surveyor General of California. In 1882, Ida and Theodore moved to a home on her portion of the family property, which became known as the Wagner Ranch. The ranch had a brick kiln, a carbide gas plant, a drying plant, a storehouse, mushroom cellar, dairy, conservatory, and olive and pear orchards. A small settlement grew up around the ranch, which was to be the only village along San Pablo Creek between San Pablo and Moraga until 1921. The site of the old Wagner homestead is now the rural campus of John F. Kennedy University. The Wagners allocated some of their property to the Orinda Park School District, which built a one-room, ten-grade school in 1883 in a pear orchard, near the southwest corner of the San Pablo Dam Road and Wildcat Canyon Road intersection today. In 1885, on the northeast corner of that intersection, Wagner built a hotel. The hotel was not very successful until the California and Nevada Railroad began to run through the area later that year, bringing hunters, fishermen, and seasonal harvest workers. When the railroad failed, the hotel failed too, and the building was razed in 1913. Remnants of the foundation can still be seen.

During its brief heyday, the California and Nevada Railroad brought urban residents from Oakland and Berkeley into the El Sobrante Valley and Orinda area to go swimming and picnicking along San Pablo Creek. Roundtrip fare was 60 cents. After turning eastward at St. Joseph's Cemetery, the railroad followed alongside the creek, first paralleling the south bank, then crossing the creek on a 100-foot-long, 40-foot-high trestle near what is now the northwest edge of San Pablo Dam. After that crossing, it followed the north bank of the creek. Almost every half mile, the train would rattle across a bridge

above one of the creek's many tributaries.

One of the visitors' favorite spots was Oak Grove Park on H. Nicholas Thode's ranch, near where Wilkie Creek enters San Pablo Creek, west of the dam (near the intersection of May Road and San Pablo Dam Road today). Under huge live oaks, Thode set up picnic tables and a large platform for dancing. His farmhouse supplied guests with fresh milk, buttermilk, homemade bread, and fresh butter. Another popular destination was Laurel Glen, beneath the huge bay trees on Clancy Ranch, near the northwestern border of the reservoir today (Kennedy Grove). Laurel Glen also had a dance platform and recreation area and was run by a French man named Chapeute, who went by the nickname of Sharkey. In Orinda, on the Symmons ranch, there was yet another picnic grove beneath large sycamores along the creek.

Although plans called for the California and Nevada line to extend to Utah, it never made it past Orinda. There was no turntable at the terminus, so the locomotives had to run the trains backwards from Orinda to Emeryville. Known as "the Grasshopper" for its frequent derailments, the train sometimes stopped moving altogether when grain that had been scattered on the tracks (after harvest of the surrounding fields) made it difficult to gain traction. Often the train was delayed by cows crossing the tracks. Sparks flying from the locomotive's stack set hay fields on fire, and the train would screech to a halt so that male passengers could help put out the fires. In the rainy season the passenger cars leaked, and riders had to hold umbrellas over their heads to keep from getting wet. Toward the end of its run, in 1893, the California and Nevada was often chartered by real estate developers bringing potential buyers to visit bucolic sites along the creek. The line was purchased by the Santa Fe Railroad in 1899 and later abandoned.

Other than the railroad, the area was accessible only by the one-lane, horse-and-buggy dirt road that ran alongside the creek-San Pablo Creek Road, which later became San Pablo Creek Highway and still later San Pablo Dam Road. During the winter rainy season, the road grew quite muddy and impassable. These conditions did not prevent fortune seekers from noticing oil seeping from one of the creek's banks in the 1860s. The second oil well ever dug in California was drilled 87 feet down into the creek's bank. The well was not prolific, however, and was discontinued, as were many of the additional wells dug nearby in the late 1800s and early 1900s. Even into the early 1920s, wildlife was still abundant in this area. In one six-month period in 1925, 167 coyotes and 72 "wildcats" (possibly mountain lions)

were killed by hunters. By this time, though, elk, antelope, and grizzly bears were becoming rare (black bears, however, were seen as recently as 1961, and present-day residents occasionally spot mountain lions).

### Dramatic Changes in the Watershed

After the 1906 earthquake, when many San Francisco residents moved to the East Bay, People's Water Company, one of the East Bay's early water providers, found itself scrambling to serve the fast-growing communities between Richmond and San Leandro. The company decided to build several new reservoirs, including the dam on San Pablo Creek and one on Pinole Creek (which was never built). The water company began buying up property in the El Sobrante area so that it could build the dam. This did not go over well with many creekside landowners, although some gave up their land willingly. The Skow Dairy was moved from the reservoir site to a new location on San Pablo Dam Road at Clark Road. Along with the dairy, the Owens Ranch, Muir Ranch, Silva Ranch, and Davilla Ranch were inundated when the dam was built. Less amenable property owners sued the water company, among them Emma Rose, who lived near the confluence of Castro and San Pablo Creeks. Although Rose failed to prevent the dam, she did succeed in keeping the water company from taking her land. Much farther downstream, another creekside property owner, Dr. David Goodale, filed suit, citing his riparian rights to the water. Goodale lived on the creek's floodplain, near the Bay, and had been pumping groundwater to grow barley, hay, potatoes, apples, and pears on his farm. In 1909, he filed his first lawsuit, asking for an injunction to prevent People's Water Company from taking the water beneath his land. According to Goodale, the water company had installed nine wells on the property downstream of him (which had formerly belonged to Fish and Blum), and was pumping large quantities of groundwater and sending it by pipeline to other East Bay cities. In 1914, the court entered an order restraining the water company from taking more than 35 million gallons per month (or 300 million gallons per year). In 1917, Goodale filed a second lawsuit, when he discovered that the water company planned to build-and had begun excavating-a large dam in the upper watershed that would divert 5,500 million gallons of water per year from the creek. Wrote Goodale:

... defendants threaten and intend to ... unless restrained by decree of this Honorable Court ... divert all the waters of said creek away from said creek and from the watershed thereof, and away from all land supplied by the waters of said creek, and will conduct said water by means of pipes and conduits to the cities of Oakland, Berkeley, Alameda, Richmond, Emeryville, Piedmont, San Leandro, Albany, and

contiguous territory for the purpose of sale and distribution as an article of merchandise ... and that no portion thereof will or can be returned to said San Pablo Creek, or to said erosional basin, and underground reservoir, existing in said San Pablo Valley and under the lands of plaintiff.

This time, Goodale's suit was unsuccessful. The dam took four years to finish, during which time the ever-struggling People's Water Company was bought out by the East Bay Water Company (the predecessor of the East Bay Municipal Utility District). More than two million cubic yards of soil were used to fill and dam the creek. The dam rose 170 feet from the creek bed and measured 1,250 feet across its crest. At first, during several drought years when flows in the creek were low, the reservoir failed to fill and even stood empty at times. Beginning in 1929, water was piped in from the Mokelumne River in the Sierra. The dam was filled just in time to avert a serious water shortage, as another drought had begun in 1928, and the reservoir had dwindled to a series of puddles.

After the dam was built, San Pablo Creek Road was moved to higher ground, along the old railroad bed, and its name was changed to San Pablo Dam Road. Between 1920 and 1923, the road was regraded and paved. As the automobile became increasingly popular in the 1920s, residential and commercial developments began cropping up in the El Sobrante and Orinda areas. Electricity arrived in 1922, when the Great Western Power Company converted a 12,000-volt line it had installed to help build the dam to 110 volts for home use. At San Pablo Dam Road off of Valley View Road, where the creek makes a broad meander near La Honda Road and Davilla today, another dam was built in the 1920s: this one was temporary and used to form a swimming hole that was part of a rural resort called La Honda Bowl. Sand was brought in and deposited on the creek's floodplain to create a mini-beach and more of a resort-like atmosphere. In addition to the swimming hole, the Bowl had a dance platform and an aviary. Run by a Mr. Smith, who lived in two railroad cars nearby, the Bowl was El Sobrante's main entertainment center for years, until the Park Theater opened. During Prohibition (1920-1936), patrons allegedly bought alcoholic beverages in a cave beneath the dance floor. In 1937, with only 100 residents, El Sobrante still had a small town atmosphere.

### Urbanization and Other Changes

The dam probably affected the creek's flows more than any other factor, but urbanization has had a great impact on the creek as well. In the 1940s the World War II shipyards came to Richmond, and housing was needed for wartime workers. Between 1940 and 1945, San Pablo's population increased

more than tenfold—from just 2,000 residents in 1940 to 25,000 in 1945. The large sugar beet field (where the El Portal Shopping Center now stands) was converted to housing, as were many other farms and fields. Thousands of homes were built as quickly as possible using whatever materials were available, to accommodate the flood of new residents. The homes were tiny—some only 200 to 300 square feet, and in the 1970s and 1980s, the city bought many of these substandard homes and replaced them with new homes and apartments and shopping centers.

After World War II, hundreds of shipyard workers from Richmond and San Pablo moved to the El Sobrante area, and the commercial strip along San Pablo Dam Road began to develop. By 1952, the strip included a furniture store, a small grocery store, a variety store, a barber shop, and a hardware store and gas station. Today San Pablo Dam Road has over 100 businesses, from cafes and restaurants to medical and law offices, bookstores, print shops, gas stations, dry cleaners, and even the office of an organic food network. Many of these businesses back onto the creek, although its steep banks prevent easy access down to the water.

While El Sobrante retained its semi-rural character, San Pablo lost most of its open space, with the exception of the corridors along the creeks. By the mid-1950s, the city was built out. The last small dairy farms had been bought up by large corporations, and the remaining family farms had been sold and subdivided for homes. Brookside Hospital was built on the banks of Wildcat Creek, and drive-in theaters, bowling lanes, mobile home parks, and restaurants cropped up along San Pablo Avenue. Fields and meadows were covered with buildings, driveways, parking lots, houses, sidewalks, and paved roads. While these amenities have helped people live more comfortably and safely, they have also prevented heavy rains from seeping slowly into the once-spongy ground. With the new impervious surfaces, rainwater began quickly running off into the creeks. San Pablo Creek's once-clear waters carried a new load of urban grime, and grease and oil from the ubiquitous automobile.

### The Watershed Today

Between 1978 and 1980, after concerns were raised about the seismic safety of San Pablo Dam, the reservoir was drained and a new dam was built by the East Bay Municipal Utility District (which had bought out the East Bay Water Company in 1923). The new reservoir covers 834 acres and stores untreated water, about half from San Pablo Creek and half piped in from the Mokelumne River. No one knows exactly what historical flows on San Pablo Creek were like below the dam, but they were

certainly higher than they are now, since most of the water that would have continued flowing downstream is now held back by the dam. The sediment that would have been carried by that water is withheld too, and the gravels in which salmon lay their eggs are no longer replenished. Steelhead cannot reach spawning habitat above the dam, but they still swim up the creek into El Sobrante to just below the dam-although no one is sure whether they are reproducing there. Since all Central Coast steelhead recently received federal protection as a threatened species, it is possible that the water district will be required to release water for fish, particularly in dry years. In some years, when the reservoir is very full, the East Bay Municipal Utility District releases small amounts of water (a maximum of 250 cubic feet per second) over periods of several days-not for fish, but to reduce the risk of flooding downstream in the event the reservoir should become too full and spill over.

While the dam has unquestionably altered the creek's hydrology and habitat, the reservoir has created a new type of ecosystem. Fish-eating birds like bald eagles and great blue herons roost in the surrounding eucalyptus trees, while the reservoir itself attracts many different species of ducks and geese. But perhaps the greatest benefit from the dam is that much of the land around it is protected from development, because it is owned by the East Bay Municipal Utility District, which manages the watershed as open space in order to protect water quality in the reservoir. In addition, much of the utility district land is bordered by East Bay Regional Parks, further protecting open space and wildlife habitat and offering recreational opportunities for hikers, equestrians, and bicyclists.

Grizzlies and elk no longer drink from the waters of San Pablo Creek, but the creek nonetheless retains its wildness. Mixed in with the non-native eucalyptus trees are enormous native bays and buckeyes that tower above the creek, some of their trunks 20 feet in diameter (one especially large old bay tree can be seen in San Pablo on Road 20, near 18th Street). Native willows, white alders, box elders, cottonwoods, and coast live oaks line the banks too, interspersed with the non-native palms that thrive in San Pablo's balmy climate. If the creek has a signature tree, it is the California sycamore, with its huge leaves, some as large as one square foot. You can see these amazing trees-and the creek-at St. Joseph's Cemetery (stand on the bridge at Fordham Drive, and look up- and downstream) and from the parking lot of the MacArthur Community Baptist Church (on Rumrill Boulevard between Brookside Drive and Road 20). Sycamores also grow along the creek just off of Giant Highway near Parr Boulevard, which is considered unusual because they are not often found this close to the coast. This spot is labeled "Sycamore Corner" on one of the oldest maps of the area, hand-drawn by L. C. Wittenmeyer in 1863. At that time, the sycamores grew on David Goodale's farm.

To experience more of the watershed's rural past, drive or walk along Road 20, with its many historic homes. There are several spots where you can stop and view the creek from the side of the road. Another way to get a glimpse of the past is to visit the Ridge Road area in San Pablo, where the ephemeral stream is located behind the cemetery. For a few minutes you can almost forget you are seconds away from the freeway and the frantic traffic along San Pablo Avenue and other city streets. Here, the air is filled with the intoxicating scent of eucalyptus. White- and golden-crowned sparrows shuffle through the leaf litter and blackberry brambles next to the creek, which flows-or barely trickles, depending on the season-with clear, cool water.

You can also see the creek from Kennedy Plaza (at San Pablo Avenue and 23rd Street), where the city of San Pablo hopes to undertake a restoration project to repair a section of badly eroded bank. Much farther downstream, west of Giant Highway near Parr Boulevard, stop on the Third Street Bridge. You can see the change in the creek's character as it meanders through the flatlands toward the Bay. Freshwater marshes border its banks here, along with willows and buckeyes. Snowy egrets often perch in these trees while ducks paddle along in the calm water. For a broader view of the creek and surrounding land as well as to see some relatively undisturbed habitat, hike some of the East Bay Municipal Utility District lands in the upper watershed (you will need a permit to use the trails) or take the Ridge Trail from Kennedy Grove to the top of Sobrante Ridge [check] and look out over the watershed.

Even in today's much-altered watershed, San Pablo Creek provides a haven for native wildlife that rely on riparian habitat, including many species of concern, like Cooper's and sharp-shinned hawks, yellow warblers and the rare yellow-breasted chats (riparian songbirds), and-in the uppermost watershed-the threatened Alameda whipsnake and endangered red-legged frog. Unique and uncommon plants, such as the western leatherwood with its pale yellow flowers, the Diablo sunflower, bent-flowered fiddleneck, El Sobrante manzanita, Santa Cruz tarplant, and Brewer's western flax, grow near the creek and its tributaries in the upper watershed. Black oaks, their sweet acorns favored by the Native Americans, and valley oaks, some close to 100 feet tall and with roots that can grow 30 feet deep to reach water, also grow in the upper watershed. Each of these oaks can have over 300 species of birds- and 5,000 species of insects-living on, in, or around it.

In more urbanized areas, trash is often tossed down the creek's banks, and feral cats, raccoons, and opossums are probably the most commonly seen mammals. Yet if you stand very still on the creek's banks even within parts of San Pablo, you may spy a tall white bird walking slowly through the water—a great egret stalking fish. If you hear a loud chatter, look for the blue flash of a belted kingfisher, arguing with another kingfisher over nesting territory along the banks. Look high in the eucalyptus trees, where red-shouldered hawks patiently watch for rodents. And everywhere along the creek, you'll find black phoebes flirting with the water surface, diving and dipping for mayflies and small fish. In El Sobrante, the creek is receiving some new and much-needed interest, as merchants and residents redesign the downtown area along San Pablo Dam Road to make it more pedestrian-friendly and interesting. As part of this process, many of the merchants have become interested in trying to feature or otherwise call attention to the creek that flows behind their businesses but has long been forgotten or taken for granted. Homeowners, too, would like to see the creek restored and hear frogs sing again from its banks. One spot where some native plant restoration may soon take place is behind the El Sobrante Library. Some people have suggested that this might be a good spot in which to create a small amphitheater or plaza, where residents could sit and enjoy the creek.

Despite centuries of land disputes and lawsuits over flows, and in spite of the dam in its middle, occasional riprap along its banks, and even the large-scale paving and urbanization of its watershed, San Pablo Creek has continued to find its way from the hills to the Bay. Unlike smaller streams, which were more easily treated as nuisances and quickly put underground in pipes, this creek is a small river—too big, too steep, and too powerful to be treated so casually. The creek's steep ravine may have also ensured that most buildings and roads were built at the top of its banks, far from the active channel. But with new developments being proposed for the remaining open hills in El Sobrante, and an ever-increasing number of people living in the watershed, the creek will not only need to be kept accessible in places so that people can better enjoy and appreciate it, but it will also need to be protected. Protecting the creek could mean helping to restore habitat along its banks, helping to reduce pollutants that run off into its waters—whether from garbage, cars, or the cleaners and pesticides commonly used around homes—or by acting as advocates on the creek's behalf, to ensure that it always flows freely.

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Museums

For a first-hand experience of what early life in the San Pablo Creek watershed might have been like, visit the Blume House museum and the Alvarado Adobe replica at San Pablo's Civic Center. Both are

open to the public on Sunday afternoons. Call the San Pablo Historical Society for more information: (510) 215-3046.

#### Additional Creek-Related Publications

Caring for Our Creeks. A brochure published by the cities of San Pablo and Orinda in conjunction with the Contra Costa County Clean Water Program. Available through the city of San Pablo.

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#### About the Aquatic Outreach Institute

The Aquatic Outreach Institute creates and carries out involvement and outreach programs on creeks, wetlands, and watersheds for the general public as well as creating programs specifically targeted for educators in the San Francisco Bay Area. The Aquatic Outreach Institute's mission is *to promote understanding and appreciation of the natural resources of the Bay Area; increase awareness of the human impact upon these resources; and inspire community involvement and action that will protect and restore the Estuary and the watershed that surrounds it.*

AOI serves local government and the general public primarily through several Watershed Awareness Programs, in which strong community groups that advocate for and take direct action in the stewardship of local natural resources are developed. AOI also works with kindergarten through twelfth grade teachers, college professors, museum staff, docents, and other facilitators involved in environmental education, providing them with training and materials that can be used to increase their own and their students' understanding of the use, protection, and management of aquatic resources. By sharing information on creeks, watersheds, and the Bay and delta, and by providing a means to communicate this information, AOI empowers present and future stewards of the San Francisco Estuary with an enlightened environmental ethic and the confidence and skills to actively participate in decisions affecting the protection and use of natural resources.