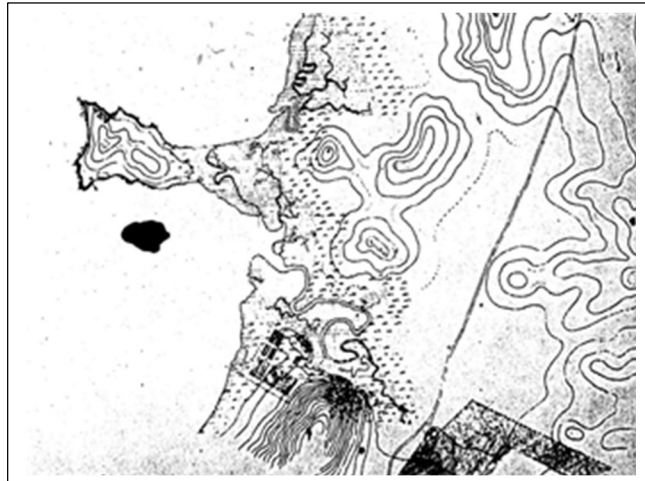
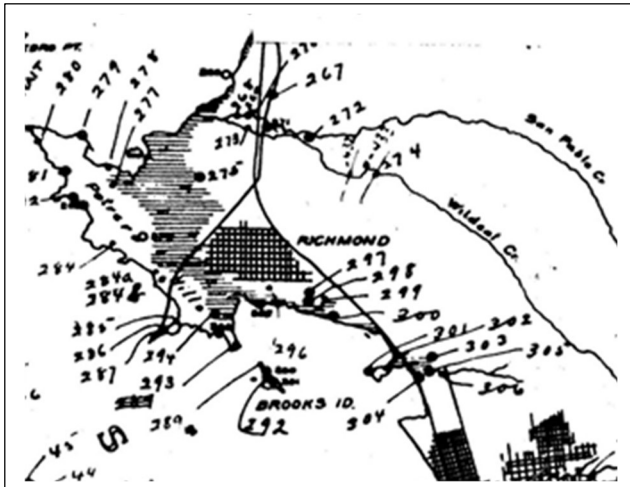


Tales of the Bay Shore -- Pt. Isabel-Stege area

Geology: The “bones” of the shoreline from Albany to Richmond are a sliver of ancient, alien sea floor, caught on the edge of North America as it overrode the Pacific. Fleming Point (site of today’s racetrack), Albany Hill, Pt. Isabel, Brooks Island, scattered hillocks inland, the hills at Pt Richmond, and the hills across the San Pablo Strait (spanned by the Richmond Bridge) all are part of this Novato Terrane. Erosion and uplift eventually left their hard rock as hilltops in a valley. Still later – only about 5000 years ago -- rising seas from the melting glaciers of our last Ice Age flooded the valley, forming today’s San Francisco Bay. The “alien” hilltops became islands, peninsulas linked to shore by marsh, or isolated dome-like “turtlebacks.”



Left: Portion of 1911 map of SF Bay showing many Native American sites near Pt. Isabel and Stege.

Right: 1853 U.S. Coastal Survey map showing N. end of Albany Hill, Cerrito Creek, Pt. Isabel, and marshes/

Native Americans: Native Americans would have watched the slow rise of today’s Bay. When Europeans reached North America, the East Bay was the home of Huchiun Ohlone peoples. Living in groups generally of fewer than 100 people, they moved seasonally amid rich and varied resources, gathering, hunting, fishing, and encouraging useful plants with pruning and burning. They made reed boats, baskets, nets, traps, mortars, and a wide variety of implements and decorations. Along the shellfish-rich shoreline they gradually built up substantial hills of debris – shell mounds -- that kept them above floods and served as multipurpose homesites, burial sites, refuse dumps, and more.

Two of the Bay’s densest clusters of these mounds lay in the area from Albany Hill to Pt. Isabel, at the mouth of Cerrito Creek, and a short way northwest at Stege near the mouth of Baxter Creek (maps above). There were also settlements on Brooks Island and Pt. Richmond. The Richmond area’s largest mound, at Ellis Landing near today’s Harbour Way, was 460 ft. long and 17 ft. high, with another 11 ft. subsided.

European diseases ravaged native populations, and European settlement destroyed the Ohlone’s way of life. Deaths continued as survivors were rounded up into missions and forced into peonage on ranchos. Later, city builders dug out the mounds for building materials or flattened them for fill, leaving only buried fragments, usually well inland from the new, filled shoreline.

Ranchos to dynamite: A newly independent Mexico granted 18,000 acres north of Cerrito Creek to Francisco Castro, a long-serving soldier. His son Victor named narrow, rocky Pt. Isabel for a daughter. He built a landing, slaughterhouse, and hotel to take advantage of its deep-water access.

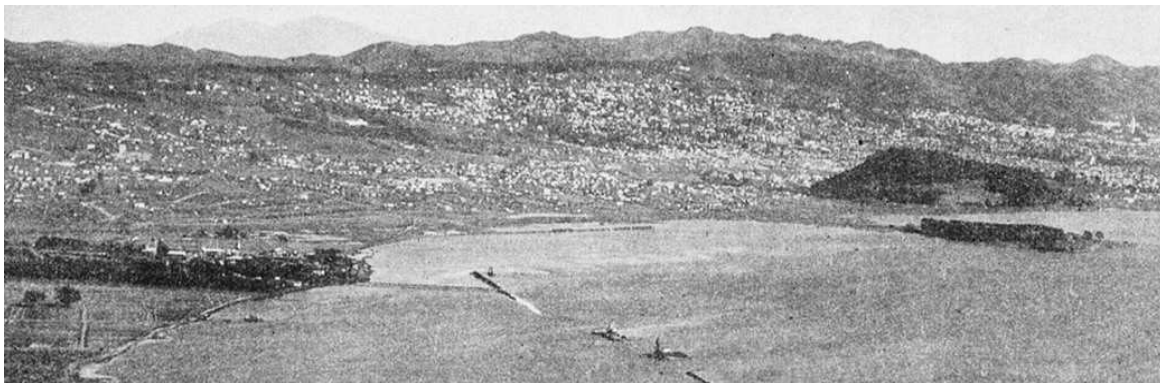
Although Victor Castro remained prosperous after the United States seized California, squatters' claims and disputes over inheritance forced sale of most of the Castro lands. A widow, Minna Quilfeldt, bought 500 acres in the 1850s. She married a failed goldminer and fur trader, Richard Stege, who used the land to raise bullfrogs and develop a resort a short way up Baxter Creek, east of today's I-580. After her death, he gradually sold off what became known as Stege.

In the 1870s, transcontinental railroad tracks reached north from Oakland, opening the shoreline's next chapter: dynamite. Manufacturing of the new explosive began in San Francisco's dunes in the 1860s, almost as soon as Alfred Nobel found ways to stabilize and detonate nitroglycerine. But continuing explosions drove dynamite making to the less developed East Bay. Giant Powder moved to Fleming Point in today's Albany in 1879. Explosions there continued to kill the (mostly Chinese) workers and threaten the growing cities. After an 1892 blast destroyed the adjacent Judson & Sheppard acid works (dynamite making needed both nitric and sulfuric acid), Giant moved north to unsettled Pt. Pinole, where it remained until the East Bay Regional Park District took over in the 1970s. Judson & Sheppard Chemical began making its own dynamite at the mouth of Cerrito Creek, using RegiAlbany Hill to protect settlement from the blasts.

About 1902, Stauffer affiliate Vigorit Powder began making and shipping dynamite at Pt. Isabel. When a 1905 blast destroyed the works at Albany Hill, Judson moved north to join Vigorit. But in 1907, 3000 pounds of nitroglycerin exploded, killing the newlywed mixing expert. Within a few years, Vigorit moved north to Hercules, where California Powder, driven out of San Francisco, had built a plant and substantial company town. Hercules Powder flourished there into the 1950s – though fatal explosions continued.

Meanwhile, about 1880, California Fuse and Cap had begun manufacturing detonators on the former Quilfeldt/Stege holdings. This and packing were safer occupations that employed many women. California Cap lasted through both World Wars, closing in 1949. UC Berkeley bought the land, now the Richmond Field Station and the US EPA's Region 9 laboratory. Remediation created today's attractive salt marsh.

As their piers molder into marsh and mud, the most visible legacy of the dynamite makers may be the eucalyptus trees planted to muffle the sounds of explosions and catch debris. On the East Bay shoreline, the presence of old eucalyptus generally signals a legacy of explosives (see photo below).



Above: Early 1930s Aerial photo of S. Richmond shoreline, with eucalyptus planted by dynamite Companies at Stege (left), Pt. Isabel, and Albany Hill. Sandy beach extends west from Stege. More training walls were built later, probably as Depression-era public-works projects.

Depression, Post-WW-II, new wildlife habitat, and a toxic legacy: From early in the 20th Century through the Great Depression, "training walls" were built to guide currents to keep channels open. Marsh grew in behind these , providing habitat for shorebirds and waterbirds (photo above, map and photos p. 4). Friends of Five Creeks, www.fivecreeks.org, f5creeks@gmail.com

What is now the upscale Marina Bay housing around Shimada Park was open water and mudflat in 1939, with the shoreline at today's inner Meeker Slough. Kaiser Shipyards II and wartime housing sculpted it into the land that was redeveloped in the 1980s.

More transformation of the shoreline came in the brief industrial boom that followed World War II. Rails that had taken shipyard workers to Kaiser's plant became a railroad that now is the Bay Trail. Along the tracks, fill and dumping were encouraged to turn tide flats into industrial land.

In 1897, Stauffer Chemical began making sulfuric acid just south of today's Richmond Field Station. It disposed of byproduct iron-pyrite cinders and later other toxics as fill. Stauffer also expanded into producing other toxic chemicals, including pesticides in the 1950s. Sold to other chemical companies, the site continued manufacturing until 1997. A legacy including arsenic, lead, mercury, benzene, acetone, PCBs, mercury, and many others made the marshes at Stege among the most toxic in the Bay. In water rust-red from iron, fish developed mixed or deformed sex organs. A 1990s remediation attempt was halted by local residents and workers who protested that it was inadequate. In late 2019, the state approved a new plan to leave and cap most of the toxic soil and require future buildings to capture poisonous vapors.

South of the 86-acre Stauffer (later Zeneca) tract, a dump accepted aluminum-mine tailings with high levels of natural radioactivity. oil-recycler Liquid Gold became a superfund site. A pistol firing range filled protective berms with lead shot. The Santa Fe Railroad had acquired immense tracts of East Bay tidelands, where it encouraged dumping to make new land. What is now the north peninsula of Pt. Isabel Regional Park was christened "Battery Point" because it contains so many lead-acid battery casings. Fenced areas in this part of the park, north of Hoffman Channel, show where lead has been found on the surface.

Point Isabel itself almost returned to nature after dynamite-making ceased. During the 1930s, the San Pablo Avenue Sportsmen's Club leased it for fishing and duck hunting, remodeling the powder house into a clubhouse. During World War II, the Navy closed off Pt. Isabel as a shooting range. In the 1950s, however, the Santa Fe Railroad dynamited the rocky, 50-foot hill to level and broaden the point for development. Stege Sanitary District, under orders to stop dumping raw sewage, bought a portion for a treatment plant (now owned by EB MUD and mothballed). The district let china-maker Tepco dump discards on the south shore, where artists now collect pink and blue fragments from "Tepco Beach."

What can this area tell us about sea-level rise due to from global warming:

- The birds that take refuge in these marshes during King Tides show the importance of high-tide refuges. If sea level rises too rapidly, these marshes could be drowned, and the habitat they provide lost. This threat is Bay-wide.
- These marshes grew recently and accidentally, largely because of training walls. They may provide models for creating new ones. A 20-year citizen struggle succeeded in stopping Bay fill by the 1980s – but fill may make a comeback, re-creating marshes to at least temporarily buffer the impact of waves and rising seas. There are early examples at Dotson Marsh in Richmond, the Oro Lomo Sanitary District "horizontal levee" experiment in Hayward, and at Corte Madera.
- Regional planners consider this general area one of the Bay's most threatened by sea-level rise – not only due to conditions along the shore. The big flood threats may be east of I-580, in industrial and low-income residential areas at or below sea level, protected by tidal flap gates that are not being maintained. Current modeling does not take into account how fresh water, from streams and rain runoff, could make future flooding worse. The toxic legacy of this area remains. As in many places along the Bay shore, rising sea levels may threaten the clay or asphalt caps and rip-rap shorelines that hide buried toxics. This is another threat generally not well studied as part of current regional planning.