

MARIN COUNTY

Santa Venetia/San Rafael

County: Marin

Risks: sea level rise, storm surge and tidal flooding, aging infrastructure, lack of affordable housing

The Santa Venetia neighborhood of San Rafael is in Marin County, wedged between the Gallinas Creek estuary and the scenic uplands of San Pedro Mountain and China Camp State Park. Its 1,600 households were built on tidal marshland that was drained and filled in 1914. Nine hundred households sit in a FEMA designated flood zone protected by two miles of levees, six pump stations, and a drainage system—all of which are not adequate to protect the community from the projected sea level rise. This site has more affordable homes than is typical of the rest of Marin County, given the history of flooding and the location of many homes that are below sea level. There are two apartment complexes serving low income and/or Section 8 tenants. There is a need to address sea level rise and outdated infrastructure. The area is near the Gallinas Creek estuary, a significant natural habitat for endangered species. This offers a unique design opportunity to safeguard a threatened neighborhood by combining cutting-edge engineering and modern watershed science to improve the estuary's natural mechanisms. Protecting the neighborhood by bolstering the creek's natural habitat will promote an ideal symbiosis and could serve as a model for a broader paradigm shift of working with nature as opposed to constraining nature. After above average rainfall during this past year, Santa Venetia has an immediate need to improve its levees. The greater watershed of Las Gallinas Creek is ripe for a rethinking of its biological and geomorphic functions, and its interactions with the human infrastructure. A breach of the levee system could displace the residents from over 900 households and impact the greater community of 1,600 single family homes, low-income housing complexes, and a complex for low income seniors and people with disabilities. The Las Gallinas Valley Sanitary District wastewater treatment ponds (currently serving 30,000 people and 2.9 million gallons of water) would also be at risk from a levee failure in the lower watershed, which could result in an untreated discharge of wastewater into the bay and a disruption of sewage treatment service. The tracks of the regional SMART train are also vulnerable to sea level rise through this area. Furthermore, Marin County faces a housing shortage on all fronts. The potential of having Santa Venetia reclaimed by the sea from a combination of wet winters and high tides, and sea level rise, would severely impact the County's already limited housing supply.