Tiburon/Belvedere

County: Marin

Risks: sea level rise, storm surge and tidal flooding, aging infrastructure, inadequate educational systems, inadequate health systems

The City of Belvedere is a residential community situated between Richardson Bay and greater San Francisco Bay at the entrance to Raccoon Strait, and consisting of two former islands connected to the Tiburon peninsula by two causeways (Beach Road and San Rafael Avenue). These roads act as levees which enclose a lagoon, built out in the 1950s on seismicallysensitive fill. About 250 single family homes and about 100 rental units front the lagoon and about 100 additional homes front open water of the bays; many of these homes are built partially on pilings. Access to Belvedere is solely through Tiburon, which in turn is vulnerable to flooding, because it has a single main access artery to Hwy 101 (Tiburon Blvd), and a single two-lane alternate route, Paradise Drive, both subject to flooding. Weekday ferry service transports commuters from Tiburon to San Francisco. Belvedere has its own police department, but contracts with Tiburon for fire and medical emergency service. The cities share a water treatment facility, also located in Tiburon. Belvedere's location presents sea level rise resiliency challenges that many other shoreline communities face, not just in the San Francisco Bay Area, but worldwide such as Portofino, Italy, another coastal town where hillsides meet the rising sea. The potential vulnerabilities that threaten this site include flooding, sea level rise, storm surge and critical infrastructure. The most vulnerable buildings are hundreds of residential properties located on Belvedere lagoon, residences located directly above the Bay on Belvedere Island and Corinthian Island; government facilities including City Hall, the police station and the corporation yard; as well as parks and open spaces. Emergency services are accessed by only two roads, which are located on levees. FEMA has recently declined to certify the levees so the city is currently evaluating the integrity and sufficiency of its levee system, particularly as relates to storm surges and sea level rise, and is partnering with the California Department of Water Resources to accomplish this work.

Belvedere has a population of approximately 2,100 residents, of whom 30% are seniors 65 years or older. There are many families with small children, yet the only school within the city limits is a nursery school. All school age children attend the public schools in the Tiburon Reed School District or elsewhere. Government buildings, including police and public works headquarters are all within the floodplain. There is no hospital, medical service, emergency shelter, or fire department within the City. Beach Road and San Rafael Ave (atop the levees) are the only access arteries into and out of Belvedere. Critical infrastructure, including telecommunications, utilities and water, is largely undergrounded via these access points.