

Corte Madera

County: Marin

Risks: sea level rise, storm surge and tidal flooding, aging infrastructure, liquefaction

Corte Madera, particularly east of Highway 101, is a low lying area within the FEMA Special Flood Hazard Area. A portion of the site is protected by an existing levee while another portion of the site is open to San Francisco Bay and currently experiences tidal inundation during king tide events. The site was originally marsh land and was constructed over varying thicknesses of bay mud. The site continues to experience settlement and is in an area known to be susceptible to liquefaction.

The site contains a unique combination of physical vulnerability challenges as well as social vulnerability challenges. Physical deficiencies within the site need to be addressed in the near future considering the site already experiences inundation during king tides. The site contains an array of residences, businesses, public safety facilities, public infrastructure, several schools and an arterial street that connects these elements.

Physically, the site is partially protected by an approximate one mile long levee that has started to sag in several sections due to settlement. In addition, the levee was constructed over 60 years ago and was not originally designed to account for sea level rise. Another portion of the site is open to San Clemente Creek and San Francisco Bay and instead of being protected by a levee, this portion was originally designed higher in elevation to drain naturally; however, continued settlement has significantly lowered ground surface elevations such that in king tide events, some of the site is inundated by bay water. This past winter, a 10-year storm coupled with a king tide event, caused extensive inundation and the temporary closure of major streets.

Disruption in services due to frequent inundation would cause a significant hardship not only on Corte Madera, but surrounding communities as well, including public safety services, housing, schools, significant utility infrastructure, businesses, and transportation infrastructure.