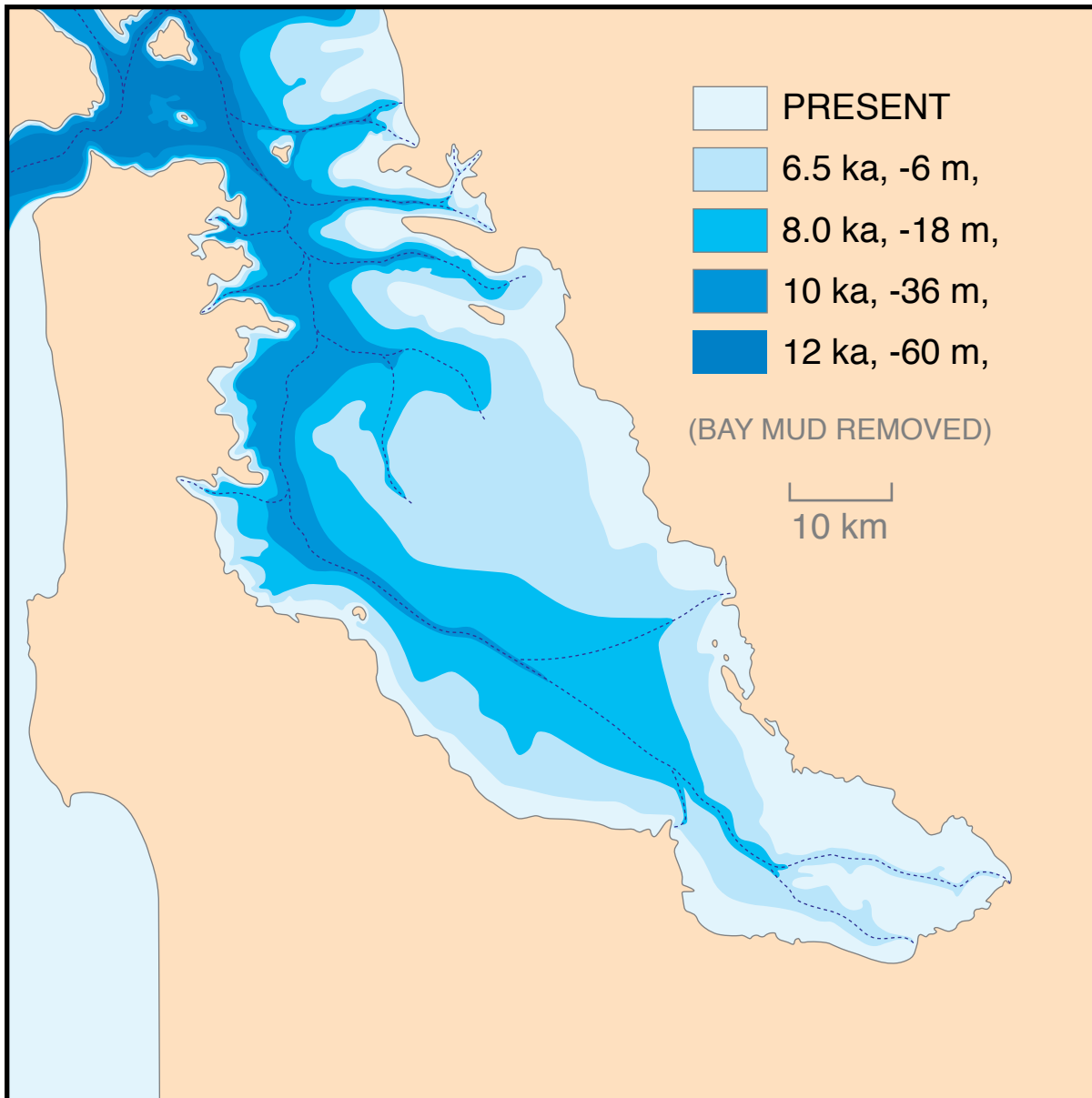


# RISING SEA LEVEL AT THE END OF THE ICE AGE PARTIALLY FLOODS A VALLEY TO FORM SOUTH SAN FRANCISCO BAY



The rapid rise in sea level at the end of the last Ice Age flooded a subsiding tectonic basin to form south San Francisco Bay. A bay exists in this basin only during interglacial sea-level high stands, which occur only about every 100,000 years and last only 6,000 to 10,000 years. The bay has been near its present size for about 5,000 years, so it should begin to recede in the next 1,000 years or so as sea level falls during the slow climatic descent into the next Ice Age. Another bay will form in about 100,000 years, when sea level again rises during the next interglacial period. Until then there will be no bay. Clearly, San Francisco bay is an anomaly, an ephemeral geologic feature. The oldest exposed shell mounds around the bay are about 5,000 years old, and their bases lie as much as 5m below sea level. If humans occupied the basin by 10,000 years ago, when the bay began to form, their shell mounds are now buried beneath recent bay mud. NOTE: ka = 1,000 years.