Currently, there is no single view of the Holocene global sea level kinematics. At the same time, the question of a possibility of it exceeding the current sea level by several meters is being debated. The accumulative coasts of nearly tide-free seas, in areas where the vertical direction of coastal movement remained unchanged are the most convenient objects for studying this major paleogeographic issue. Effects of the sea level fluctuations are revealed in the resulting geomorphological structure and in the nature of sediment areas of the coastal zone developing in an accumulative mode. If the Holocene sea level exceeds its modern marks, then ladders of accumulative terraces would have formed over different parts of the coast. The heights of the terrace ladders would correspond to the amplitudes of these exceedances. The lower sediment levels should reflect the transgressive character of their formation in the structure of geological section, while the higher levels would reflect the regressions. The coast of the Thatcher Peninsula, located in the Bay of Cumberland microcontinent of the South Georgia (Antarctic) was the focus of our research. It was established that the Holocene sea level in the region reached its current state no later than about one thousand years ago and did not exceed it, being subjected to only minor fluctuations of the synoptic scale. The accumulative terraces are located in fragments. The differences in their absolute elevations are related to their correspondence to different tectonic units experiencing differentiated uplift.