Extract from NIWA report 2022, Bosserelle & Allis.

Occurrence of a major earthquake in the next 100 year is not accounted for in the analysis. However, a major earthquake along the Alpine Fault would significantly affect the shoreline. Co-seismic displacement would modify the local shoreline elevation relative to sea level, modifying the inundation and erosion hazard. An earthquake would also cause many landslide and slips in the upper parts of river catchments, resulting in a huge pulse in sediment supply, and consequently a modified response of the shoreline.