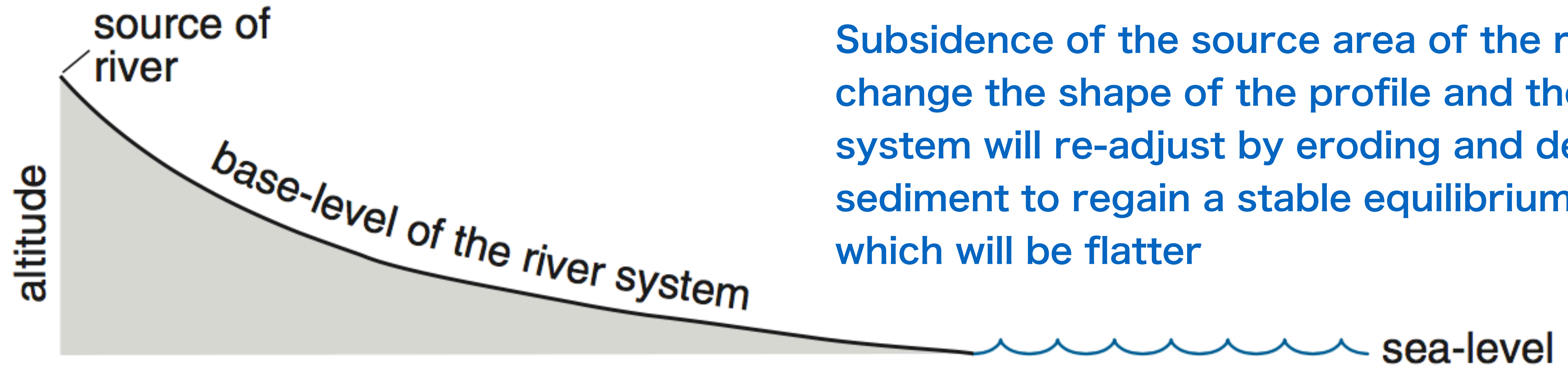
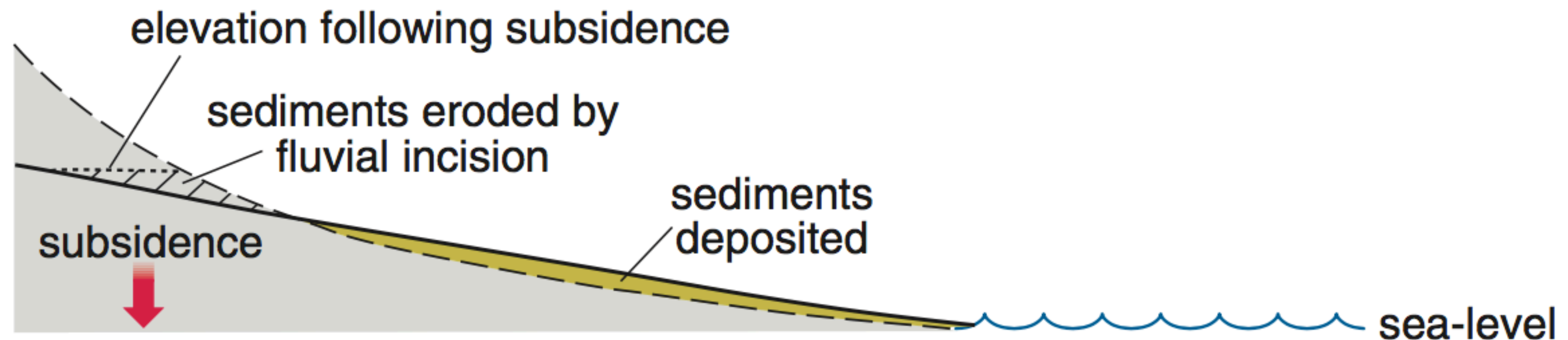


Equilibrium profile

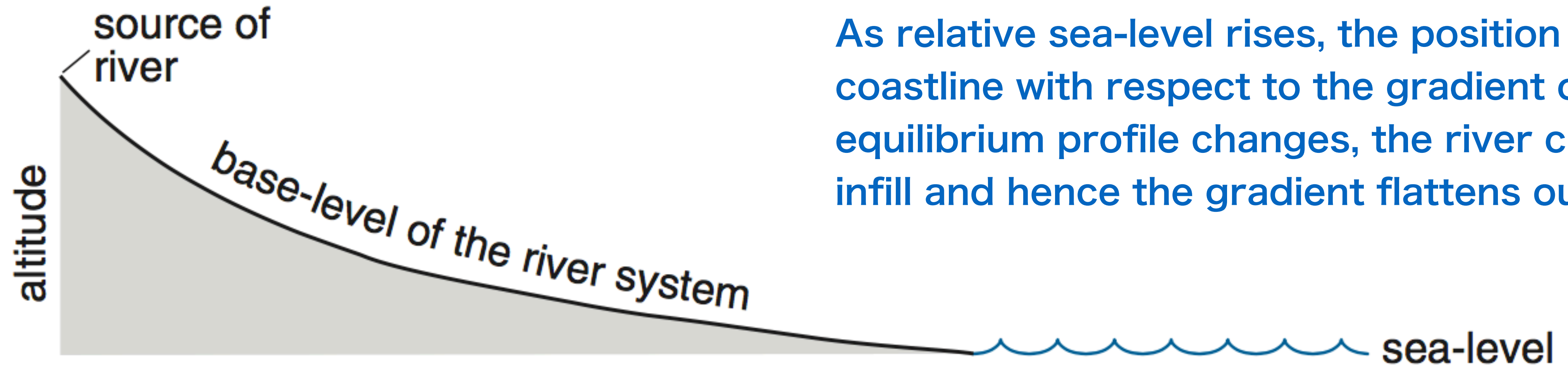


Subsidence of the source area of the river will change the shape of the profile and the river system will re-adjust by eroding and depositing sediment to regain a stable equilibrium profile which will be flatter



KEY
alluvial sediments
marine sediments

Equilibrium profile



As relative sea-level rises, the position of the coastline with respect to the gradient of the equilibrium profile changes, the river channels infill and hence the gradient flattens out

