

Fig. 1. Scheme of interaction of groynes, waves, currents and shore

tides no tides high water low water MSL ∇ beach (c) sandbags filter cloth

Practical values for L and X

▶ U.K.:

- L and X are about 60 m for shingle beaches, X/L between 0.5 and 1.5
- L is about 100 m and X is about 130 m for sand beaches; X/L between 0.8 to 3
- ▶ **Holland**: L between 100 to 200 m and X is between 200 to 400 m, X/L between 2 and 4.

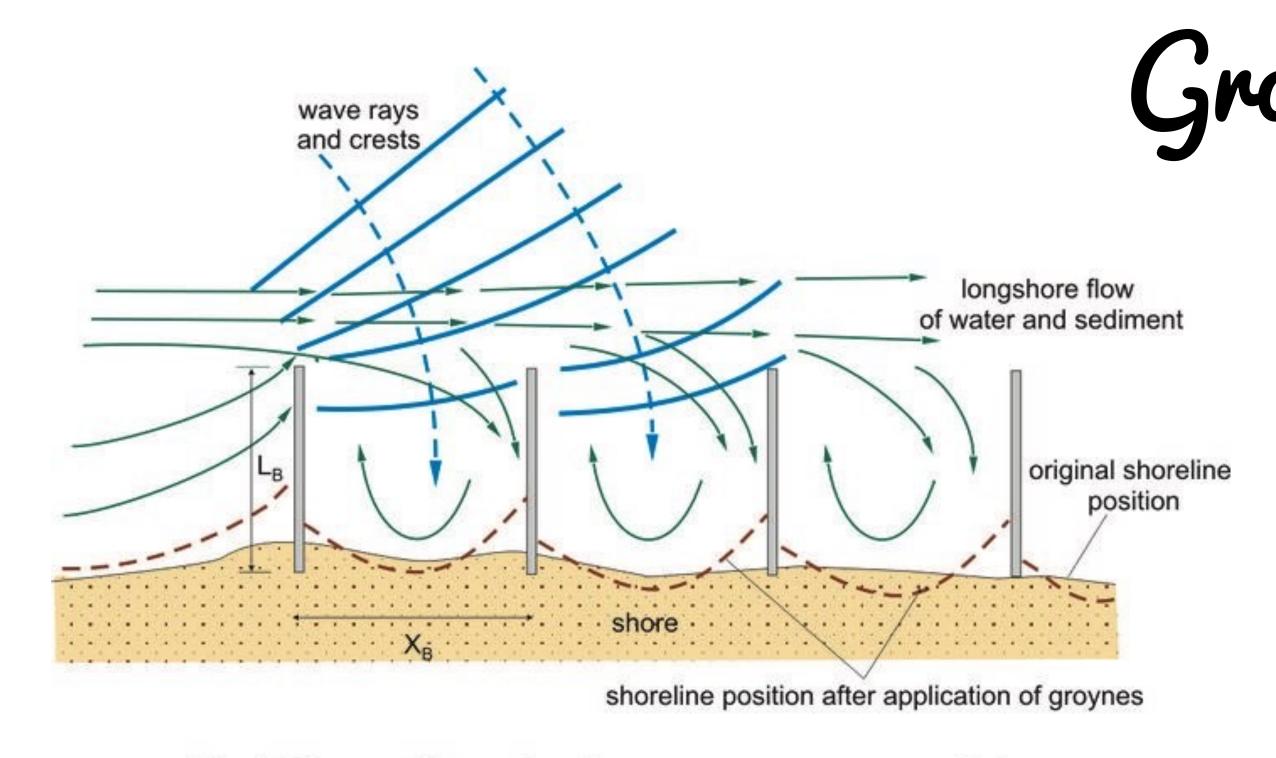
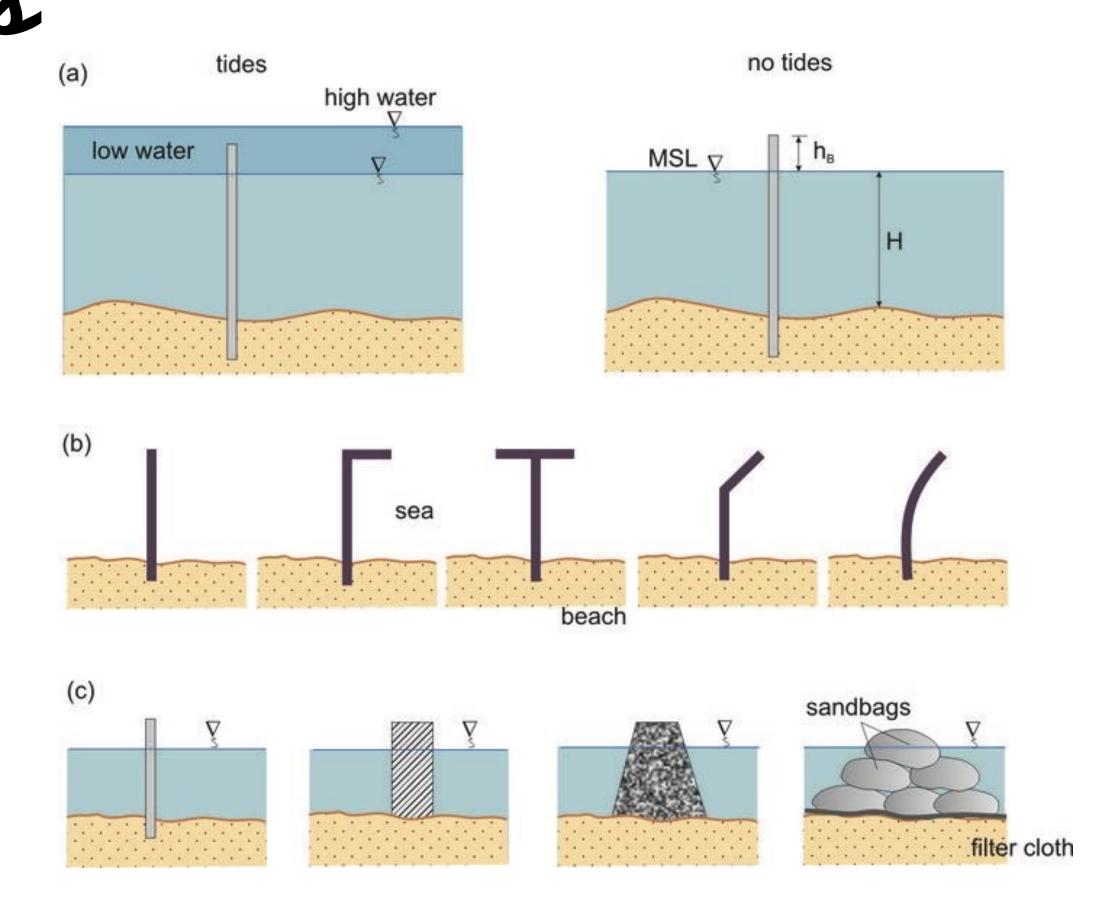


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Practical values for L and X



- The effectiveness of groynes is strongly related to the degree of blocking of the littoral drift and this depends on
 - > the groyne length in relation to the width of the surf zone (about -6 m to MSL)
 - the spacing and overall geometry
 - the crest height, the mean sea level and the tidal range
 - the beach material (sand, shingle or mixture)