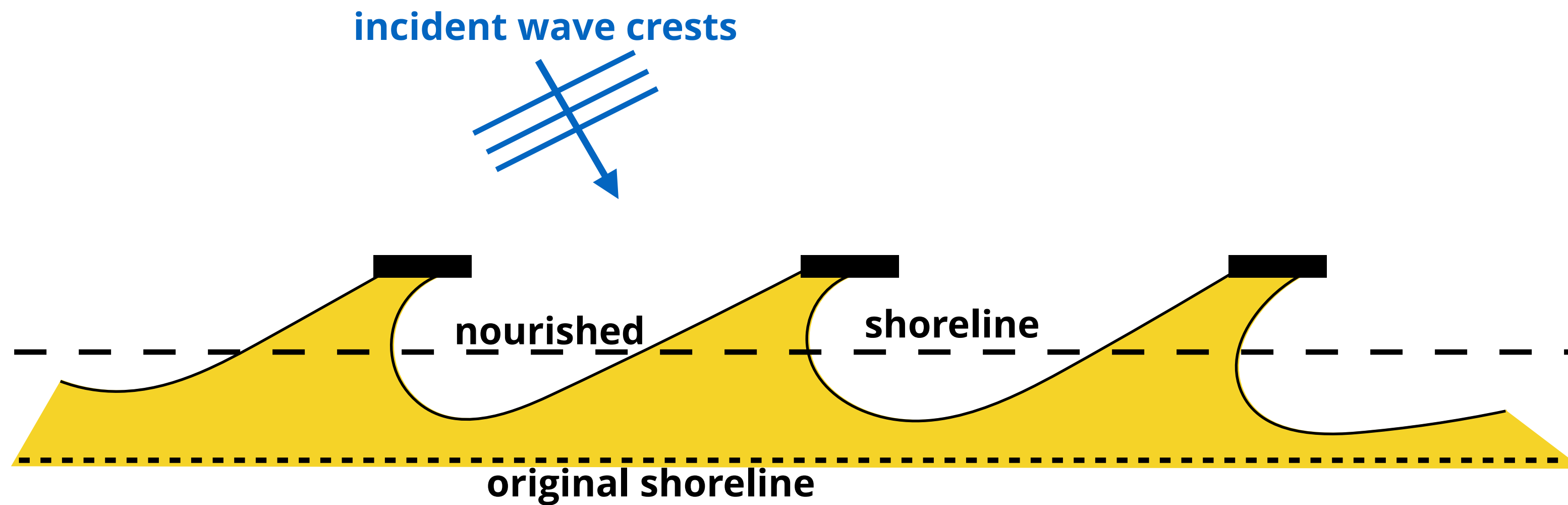
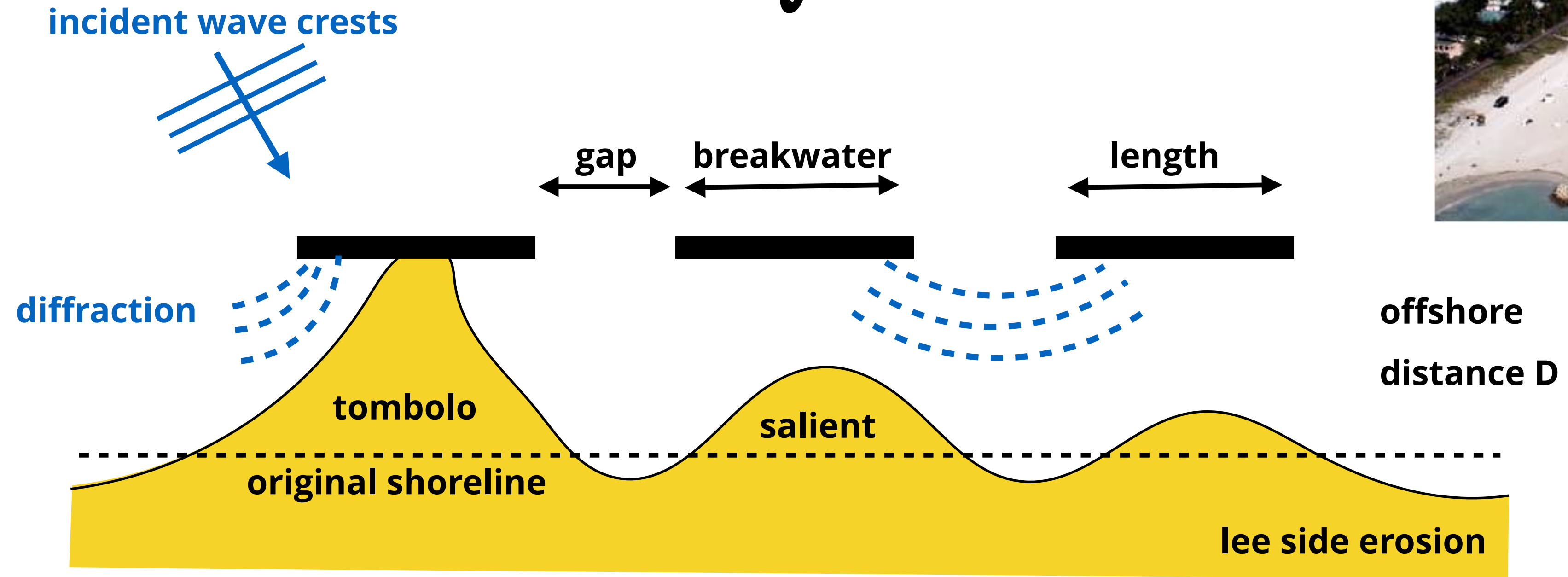
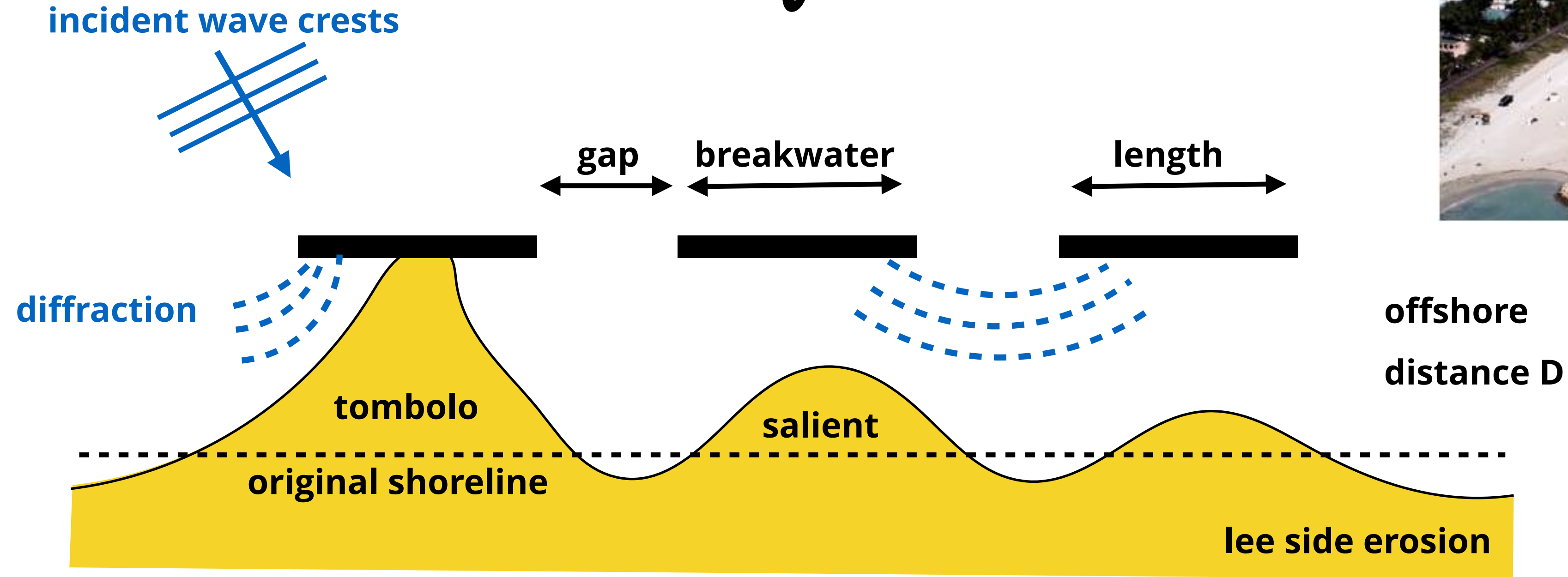


# Coastal protection



# Coastal protection



The breakwater length ( $L$ ) should be at least 2 times the design wave length and the gap length ( $L_{\text{gap}}$ ) should be smaller than the design wave length. The offshore position ( $D$ ) should be based on the desired shoreline pattern.