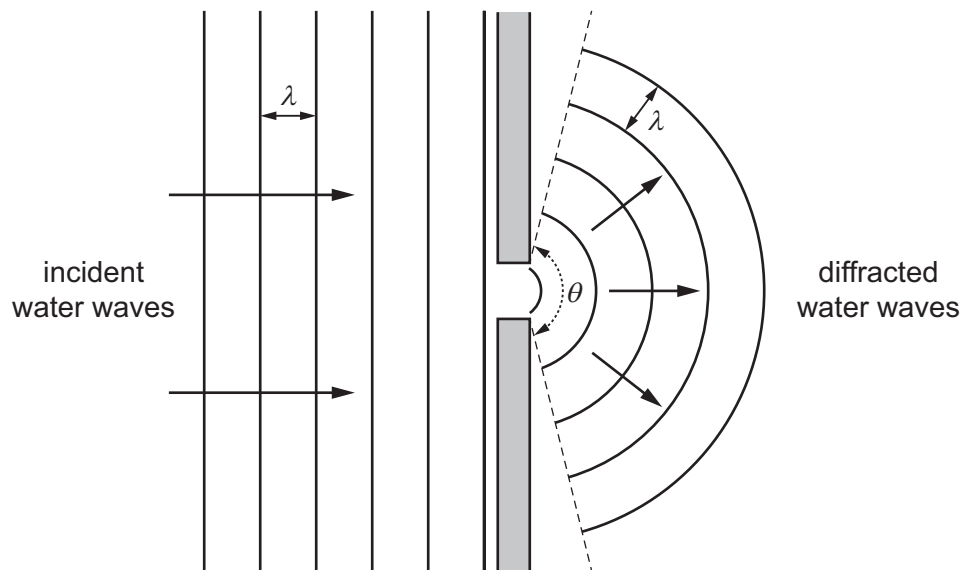


- 27** Water waves of wavelength λ are incident normally on an obstacle with a narrow gap. The width of the gap is equal to λ . The waves from the gap emerge over an angle θ as shown.



The gap is slowly widened.

Which changes, if any, occur to θ and to the wavelength of the emerging waves?

	θ	wavelength
A	decreases	remains the same
B	increases	remains the same
C	remains the same	decreases
D	remains the same	increases