



MASS MOVEMENT, WIND & WAVES

How does mass movement, wind and waves help shape Earth?

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- Mass Movement - the pulling of rock and sediment downhill by the force of gravity
- Characteristics: unsorted sediment



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- Mass movement involves two forces:
 - Gravity - the force of attraction where objects fall towards the center of the Earth
 - Friction - the rubbing of one object against another
- When rain weakens the force of friction gravity then pulls rock and sediment down a slope

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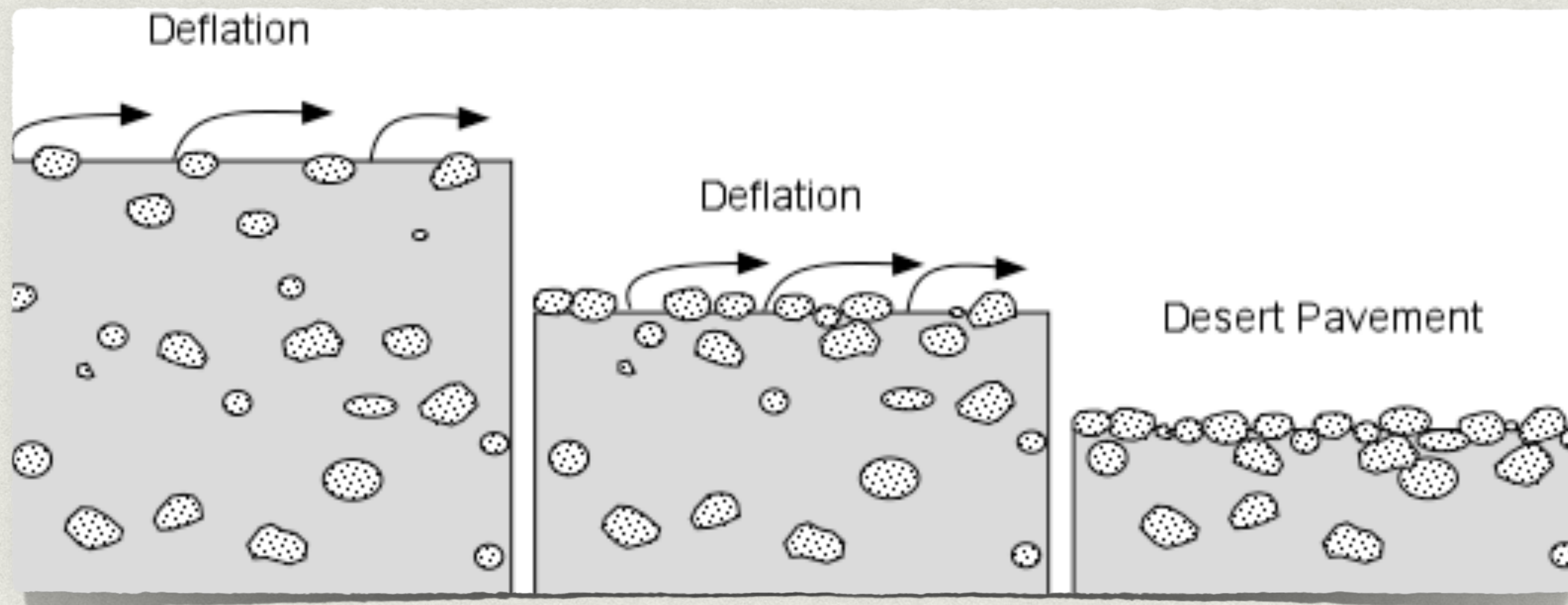
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- Wind - air that is moving horizontally that transports loose sediments [sands and silts] to a new location



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- Deflation - wind blows away loose sediment lowering the land surface until there is no more loose sediment to erode

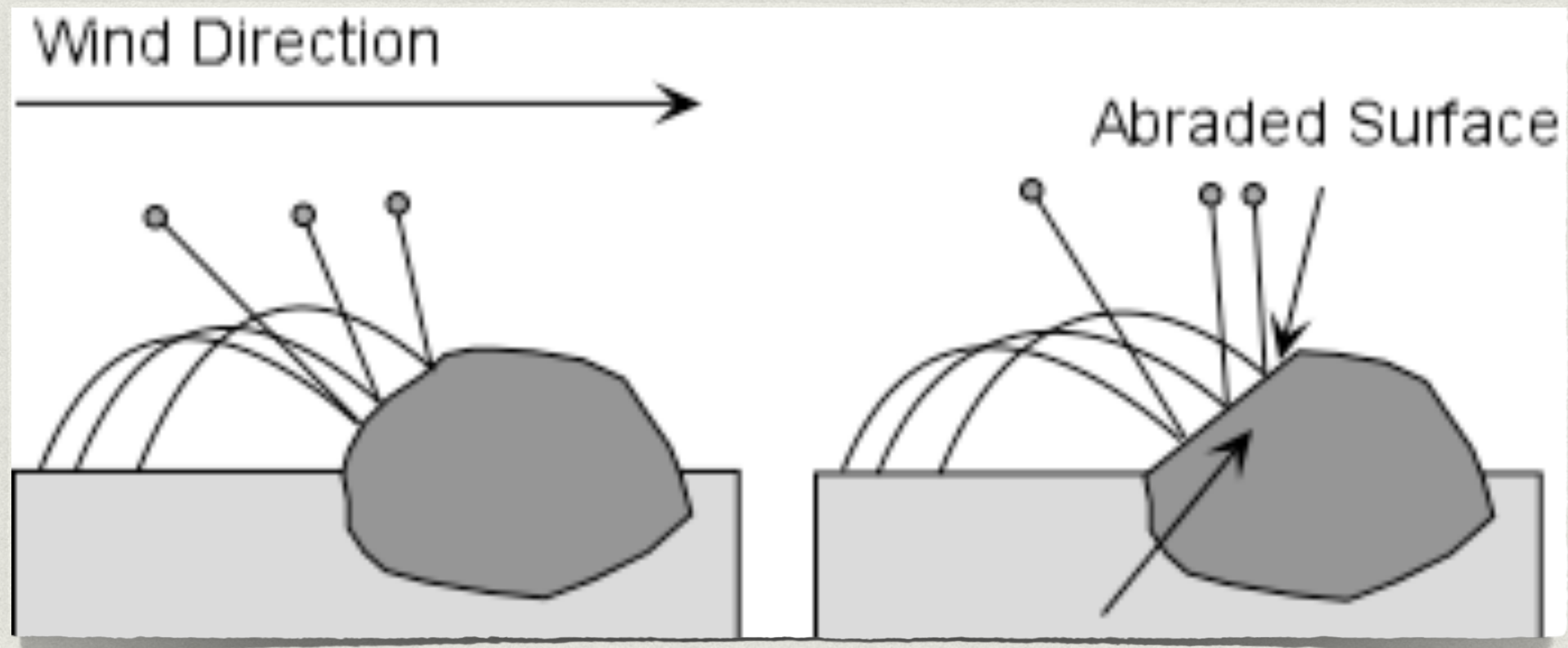


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- Abrasion - wind picks up and blows smaller sediment against another surface wearing it down

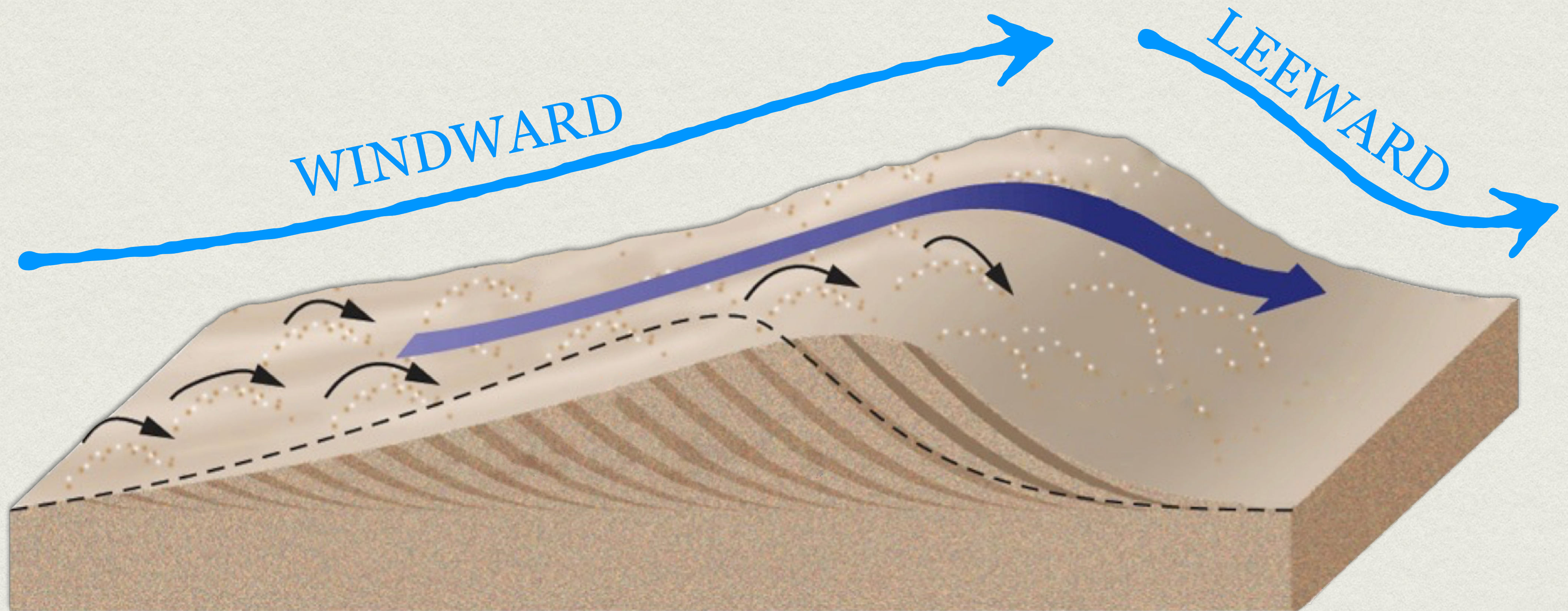




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- Sand Dune - depositional feature when sand is deposited in layers or mounds
 - Windward side: gentle slope
 - Leeward side: steep slope

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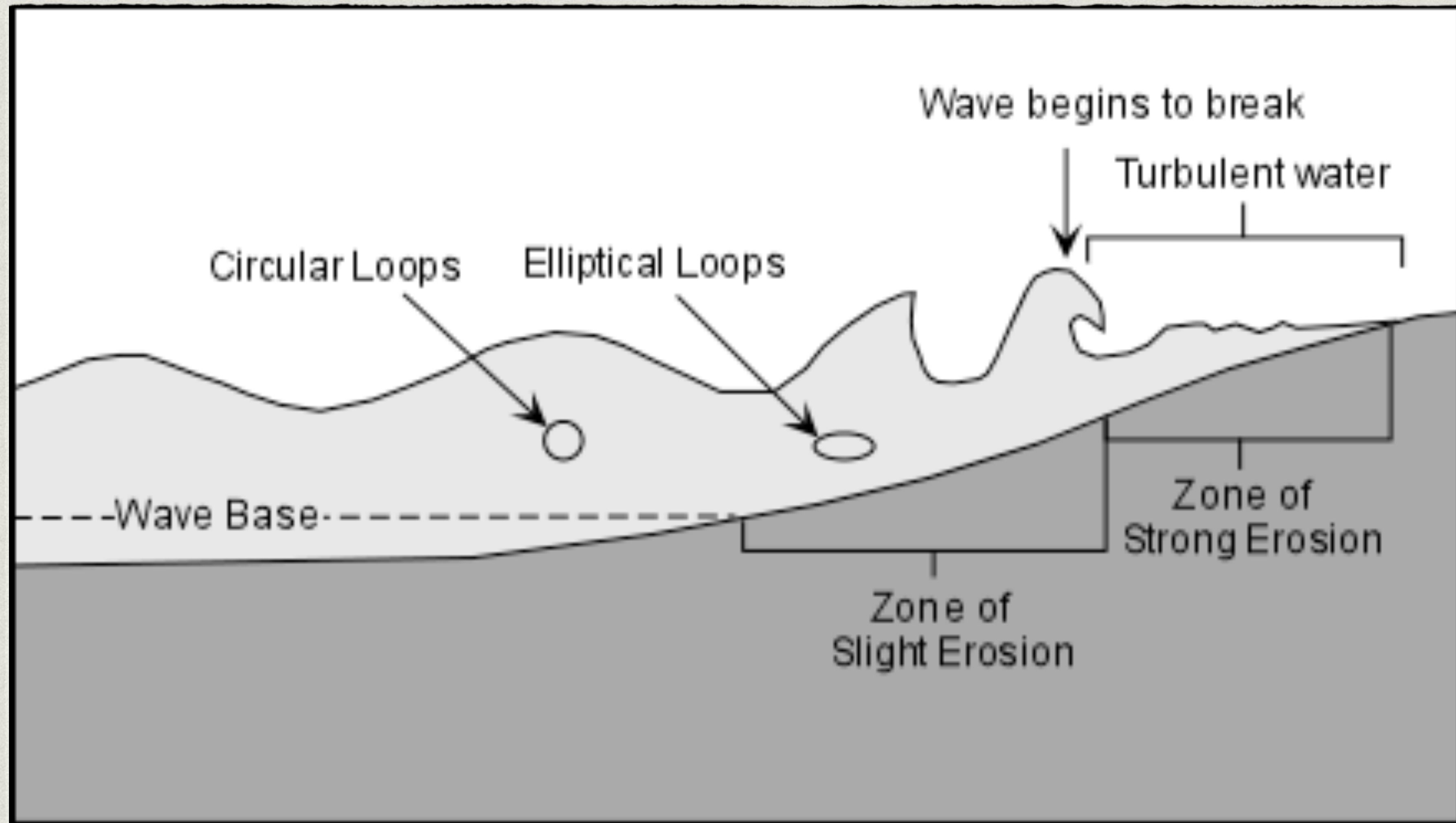
- Waves - the up and down motion of water in the ocean or lake; usually caused by wind



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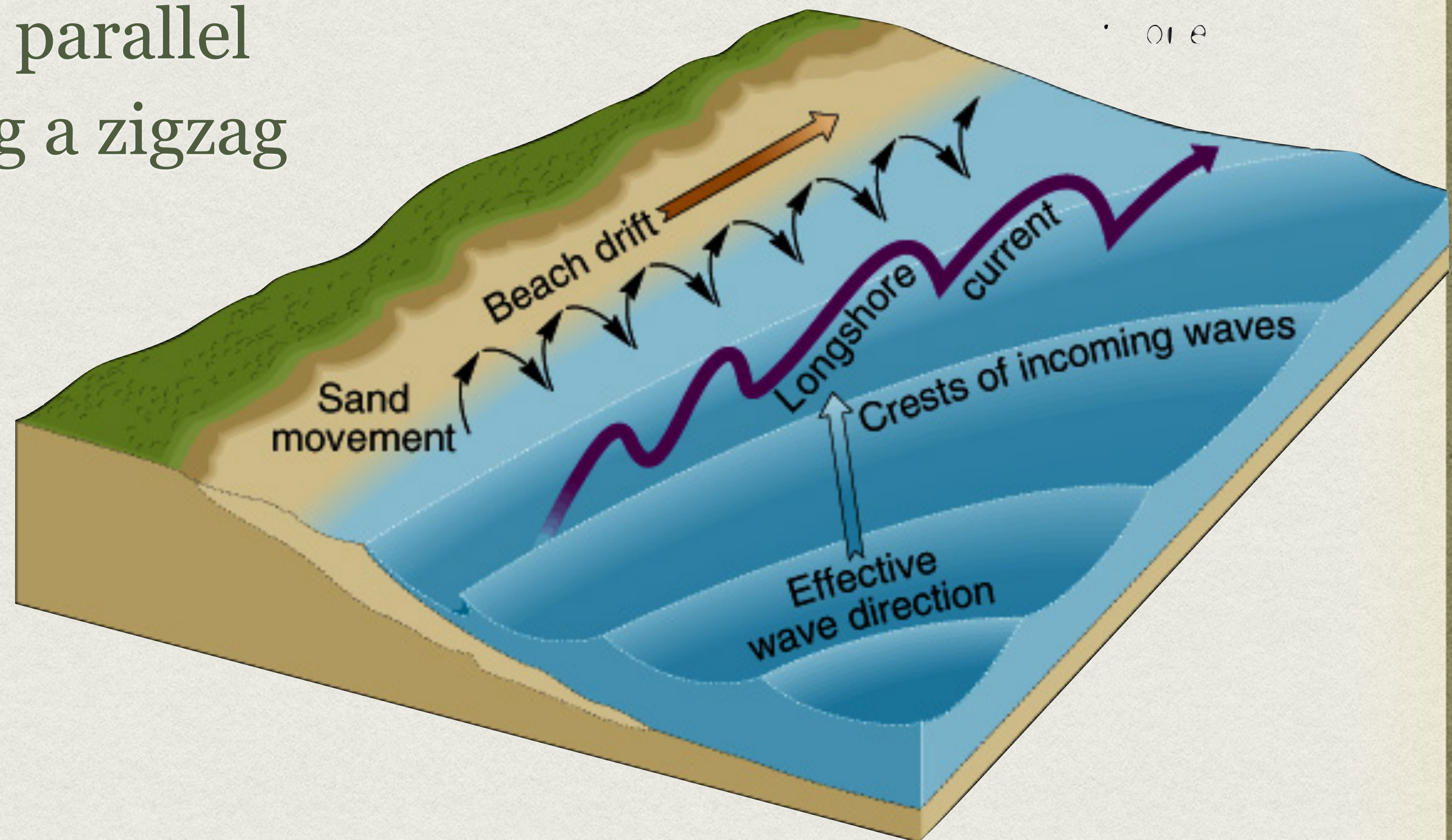
- Wave Formation:
 - As wind pushes a wave towards the shore, it drags along the ocean floor
 - The dragging slows the bottom of the wave, but the top continues at the same speed
 - Eventually the wave becomes unstable and “breaks”

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- Waves approach the shore at an angle, but retreat parallel to the shore, creating a zigzag pattern



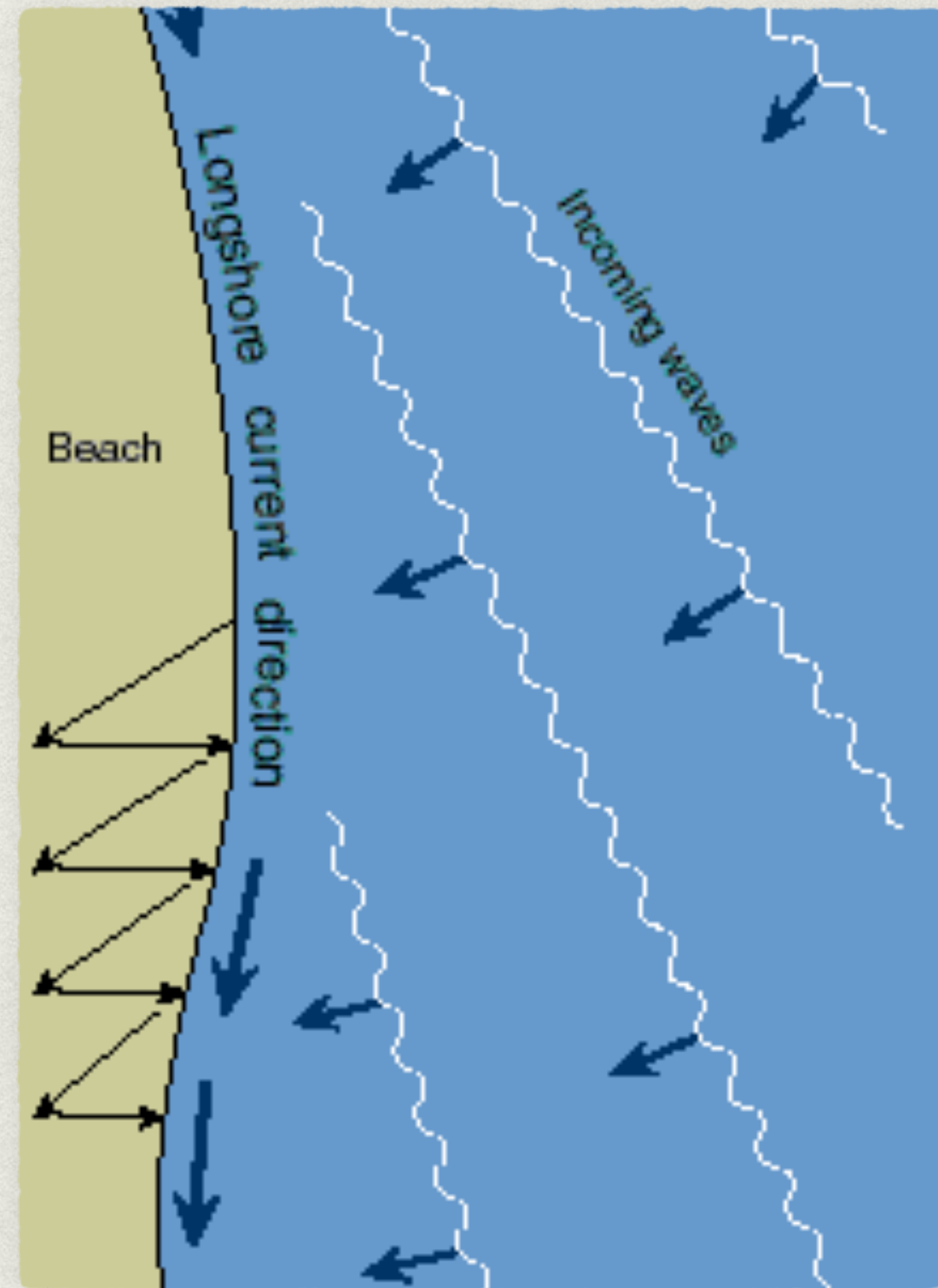
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- The zigzag pattern carries sand parallel to the shore

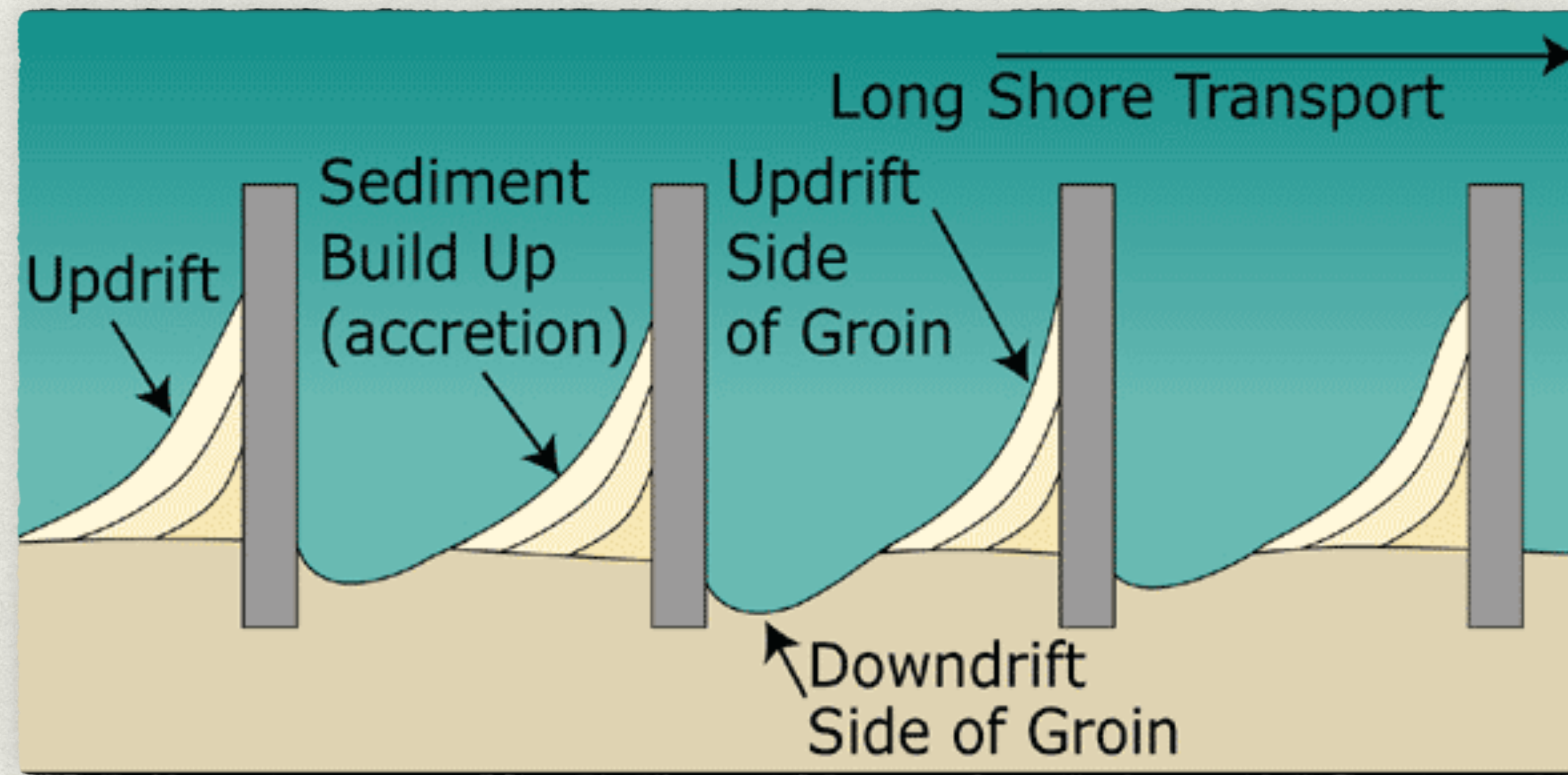


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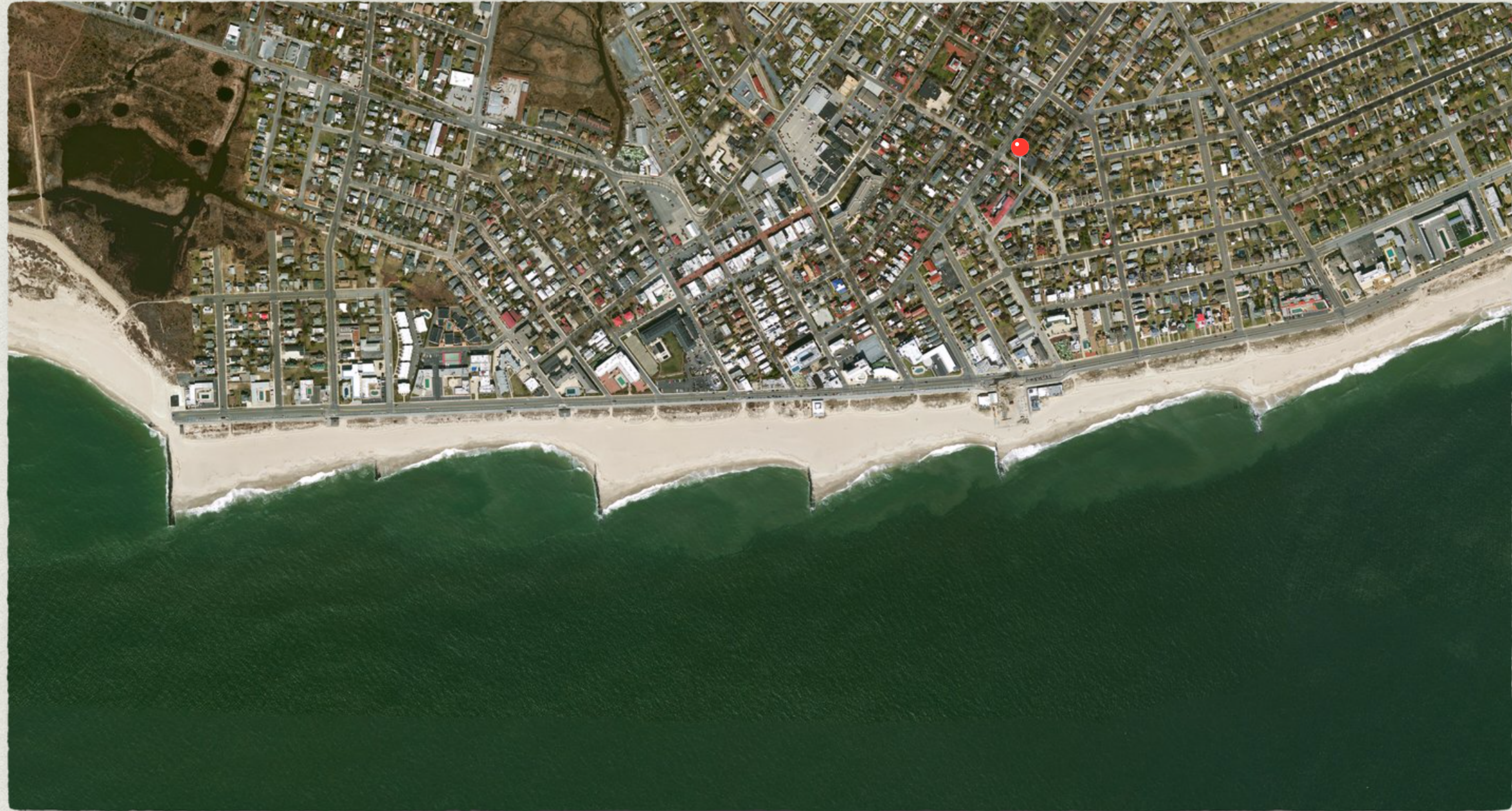
- Long Shore Current - ocean current that flows parallel and close to the shore



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