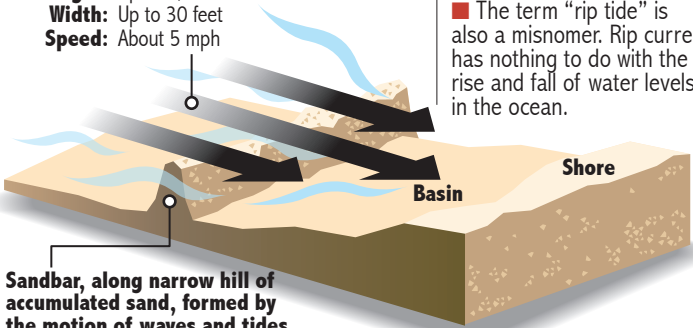


HOW RIP CURRENTS CAUSE DROWNINGS

A rip current is a narrow, powerful current of water being pushed toward the shore by strong winds from the sea. Here's a look at how it can endanger the lives of swimmers on the beach

- 1** A swell of water forms a rip current that rushes to the shore along the surface of the sea. Some of the water underneath are held back by sandbars.

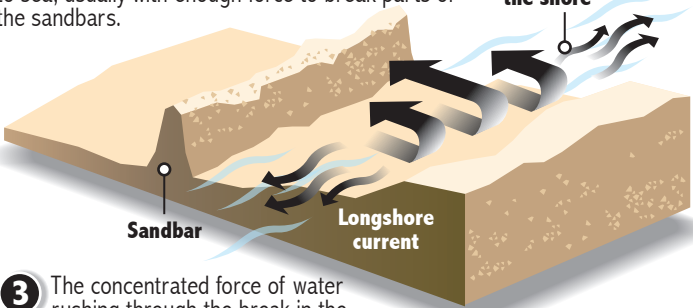
Length: Up to 2,500 feet
Width: Up to 30 feet
Speed: About 5 mph



Sandbar, along narrow hill of accumulated sand, formed by the motion of waves and tides.

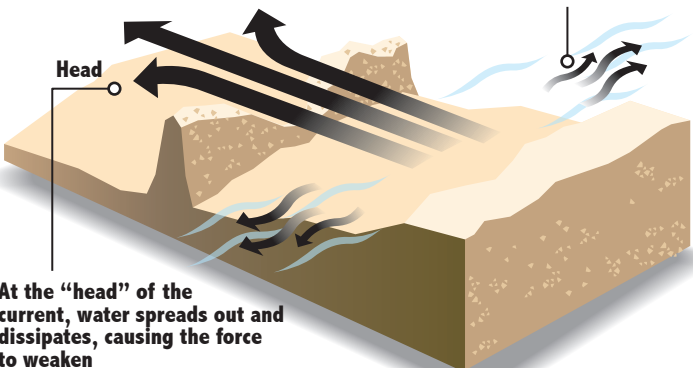
- 2** The current moves into a "basin" formed between the shore and the sandbars. When it hits the shore, water bounces and surges back out to sea, usually with enough force to break parts of the sandbars.

The wave impact on the beach forms "longshore currents" that run parallel to the shore



- 3** The concentrated force of water rushing through the break in the sandbar creates a powerful, deadly current that can pull swimmers out into the open sea.

Longshore current



At the "head" of the current, water spreads out and dissipates, causing the force to weaken

Sources: www.howstuffworks.com;

<http://newton.dep.an.org>; www.everything2.com

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