How do Rip Currents Form?

As waves break along sandbars, they transport water toward the shoreline. Since the water has no place to go once it reaches land, it begins to pile up, and is kept in place by the incoming waves. *Rip currents* are formed when the pressure generated by the trapped water is strong enough to overcome the incoming waves, or when there is a lull in wave activity, and the excess water begins to flow back out to sea.

Aerial View



View from Shore



Recognize Rip Currents!

An Area of Unusual Choppiness or Discoloration Strong Currents Moving Away from Shore

If Caught in a Rip Current

- Stay Calm, Tread Water or Float Call or Wave for Assistance
- Don't Swim Against the Current
- Swim Parallel to Shore When In the Rip Current
- Once Out of the Current, Swim Directly to Shore



Swim near a lifeguard – Don't swim near structures

WHEN IN DOUBT - DON'T GO OUT!

How do They Work?

In shallow water, the rip current extends from the surface all the way down to the seafloor. As the rip current flows seaward into deeper water (beyond the sandbar), it becomes strongest near the surface. As the current is traveling across the sandbar, it erodes a channel. Incoming waves do not break in this channel (deeper water), allowing the rip current to maintain its seaward flow undisturbed.

Where are They Found?

Although rip currents can create channels through the sandbar, they are never stationary nor permanent. As the wave conditions change over time, the currents adjust, filling in existing rip channels and creating new ones. Permanent rip currents can form along the sides of structures that are perpendicular to shore such as fishing piers, jetties and groins.

RIP CURRENTS ARE MORE DANGEROUS TO OCEAN SWIMMERS THAN SHARKS!

It is estimated that nearly 100 lives nationwide are claimed by rip currents each year.

Over 80% of all ocean surf related rescues are attributed to rip currents.





For more information on Rip Currents: www.ripcurrents.noaa.gov www.usla.org

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Photos: Aerial view - Delaware Sea Grant View from shore - T. Herrington

