How do Rip Currents Form?

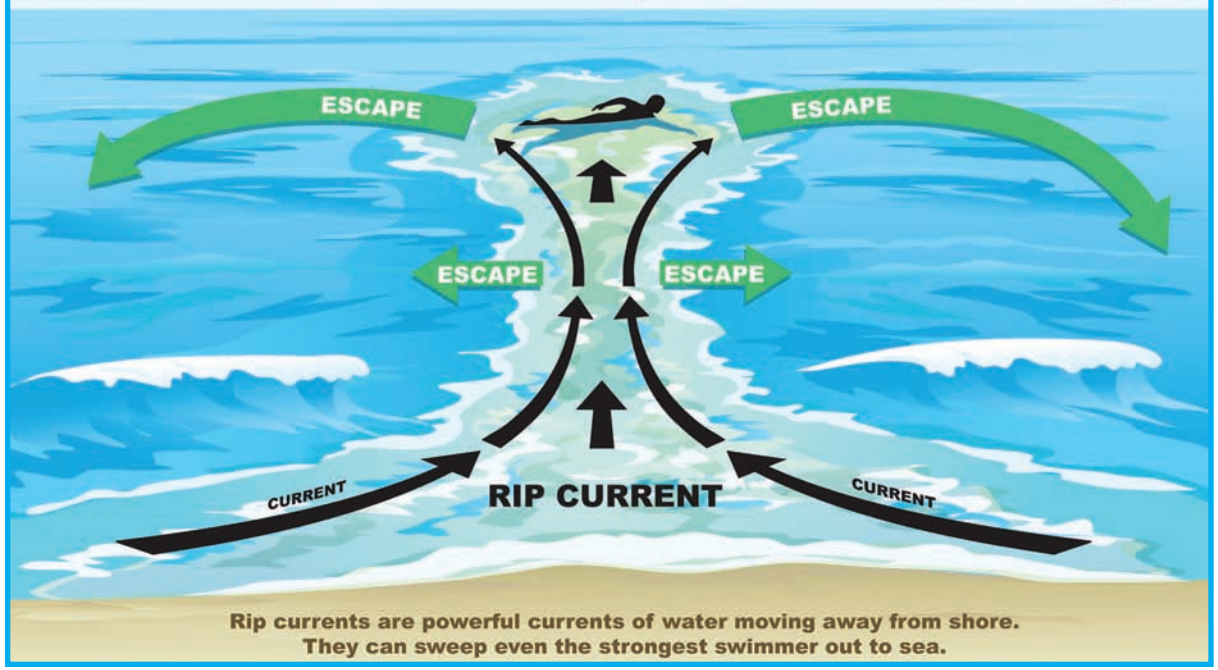
As waves break along sandbars, they transport water toward the shoreline. Since the water has no place to go once it reaches land, it begins to pile up, and is kept in place by the incoming waves.
Rip currents are formed when the pressure generated by the trapped water is strong enough to overcome the 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

RIP CURRENTS

Break the Grip of the Rip!®



Rip currents are powerful currents of water moving away from shore.
They can sweep even the strongest swimmer out to sea.

Recognize Rip Currents!

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

IF CAUGHT IN A RIP CURRENT

- **Don't fight the current**
- **Swim out of the current, then to shore**
- **If you can't escape, float or tread water**
- **If you need help, call or wave for assistance**

SAFETY

- **Know how to swim**
- **Never swim alone**
- **If in doubt - don't go out**

Always swim near a lifeguard
Never swim near structures

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 or 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.

Sponsors

Office of Maritime Resources

Office of Travel and Tourism
www.visitnj.org

New Jersey Coastal Management Program

The National Weather Service provides Rip Current Advisories for NJ beaches from Memorial Day to September.

This forecast is available online at:
http://www.erh.noaa.gov/phi/ripcurrent/getSRF.php

Beachgoers may encounter one of two rip current information signs on New Jersey beaches: a local red, white and blue sign developed by the NJ Sea Grant Program for New Jersey and a national red, white and green sign developed by NOAA and the US Lifesaving Association. In an effort to support one national message, the New Jersey Marine Sciences Consortium/New Jersey Sea Grant is phasing out the local sign that predated the national effort.

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

Rip Current Awareness