## RIP CURRENT **Break the Grip of the Rip!**® ESCAPE ESCAPE ESCAPE CURRENT RIP CURRENT Rip currents are powerful currents of water moving away from shore. They can sweep even the strongest swimmer out to sea.

### Recognize Rip Currents!

#### Look for:

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

# IF CAUGHT IN A RIP CURRENT DON'T PANIC!

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

#### **SAFETY**

- · Learn how to swim
- Never swim alone
- If in doubt don't go out

Always swim near a lifeguard

Never swim near jetties,

groins & piers

#### **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 where it 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.

#### 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.



**Aerial View** 

View from Shore



#### Where Are They Found?

Although rip currents can create channels through a 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 jetties, groins and piers.

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**















www.visitnj.org



New Jersey Coastal Management Program

The National Weather Service provides
Rip Current Advisories for New Jersey
beaches from Memorial Day to September.
This forecast is available online at:
http://www.erh.noaa.gov/phi/ripcurrent/getSRF.php

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

This publication is the result of work sponsored by New Jersey Sea Grant with funds from the National Oceanic and Atmospheric Administration (NOAA) Office of Sea Grant, U.S. Department of Commerce, under NOAA grant #NA100AR4170075 and the New Jersey Sea Grant Consortium. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of New Jersey Sea Grant or the U. S. Department of Commerce. NJSG-11-798

#### njseagrant.org

Created by Thomas Herrington, Ph.D. & Jenny McCormick
Photos: Aerial view - Delaware Sea Grant
View from shore - T. Herrington



