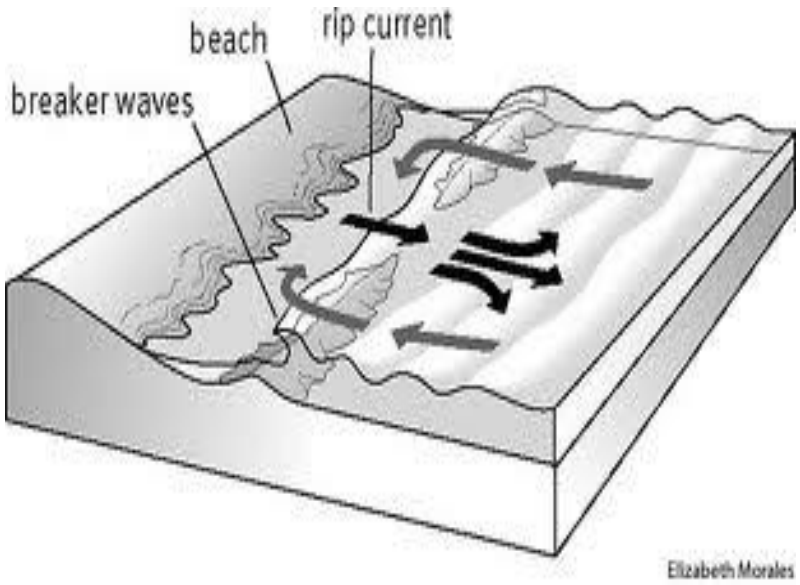
Rip Current

- A **Rip Current**, sometimes called a **“Rip Tide,”** is one specific kind of water current that can be found near beaches.
- It is a strong, localized, narrow current of water.
- It is strongest near the surface of the water
- They can be identified by a calm-looking area where waves are not breaking.

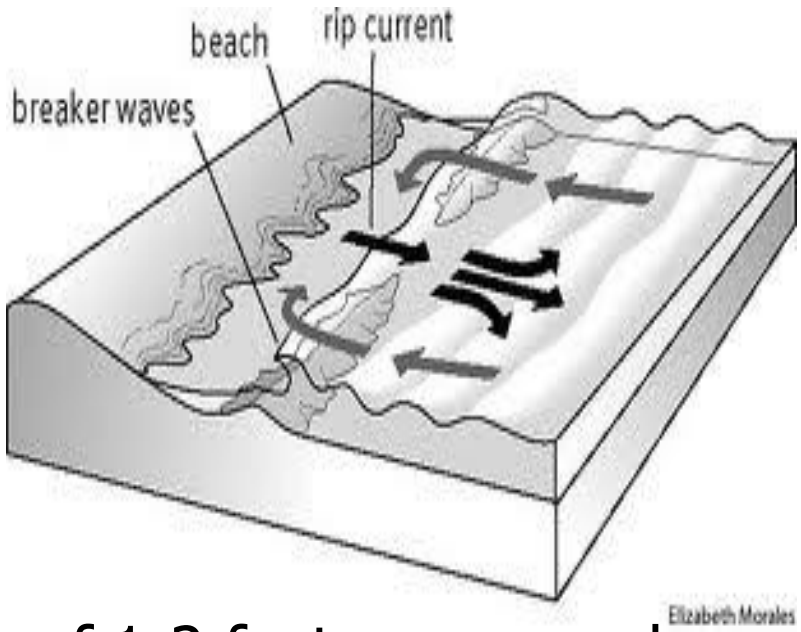
Rip Current

- Waves travel from deep to shallow, breaking near the shoreline. A rip current forms when breaking waves push water towards the land.
- Water that has been pushed up near the beach flows together (as feeder currents), and this water finds a place where it can flow back out to sea.
- It moves directly away from the shore, cutting through the lines of breaking waves.



Rip Current

- The water then flows out at a right angle to the beach in a tight current called the "neck" of the rip, where the flow is most rapid.



- When the water in the rip current reaches outside of the lines of breaking waves, the flow loses power, and dissipates in what is known as the "head" of the rip.

- A rip current can reach speeds of 1-2 feet per second and sometimes as high as 8 feet per second.

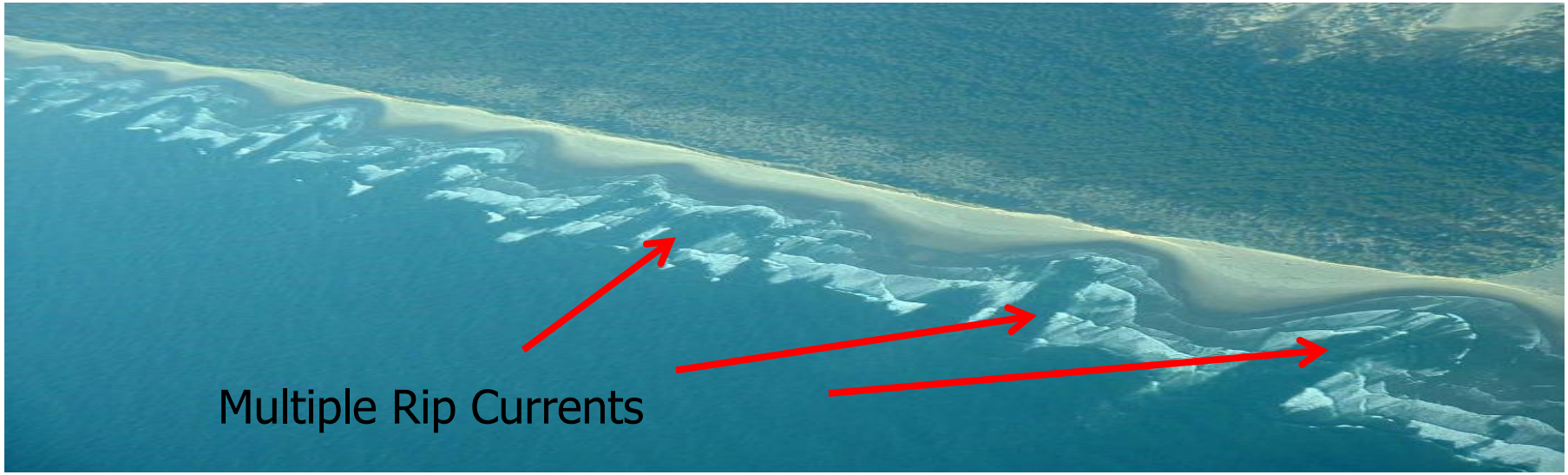
How to Recognize a Rip Current

- Different color: the rip usually differs in color from the surrounding water; it is often more opaque, cloudier, or muddier, and so, depending on the angle of the sun, the rip may show as darker or lighter than the surrounding water.
- It is sometimes possible to see that foam or floating debris on the surface of the rip is moving out, away from the shore.
- In contrast, in the areas of breaking waves, floating objects are being pushed towards the shore

How to Recognize a Rip Current

- Rip currents often look almost like a road or a river running out to sea, away from the shore.
- There is a noticeable break in the pattern of the waves: the water often looks flat where the rip is, in contrast to the lines of breaking waves on either side of the rip.
- A "river" of foam: the surface of the rip often looks foamy, because the water is churned up.

How to Recognize a Rip Current



Rip Current

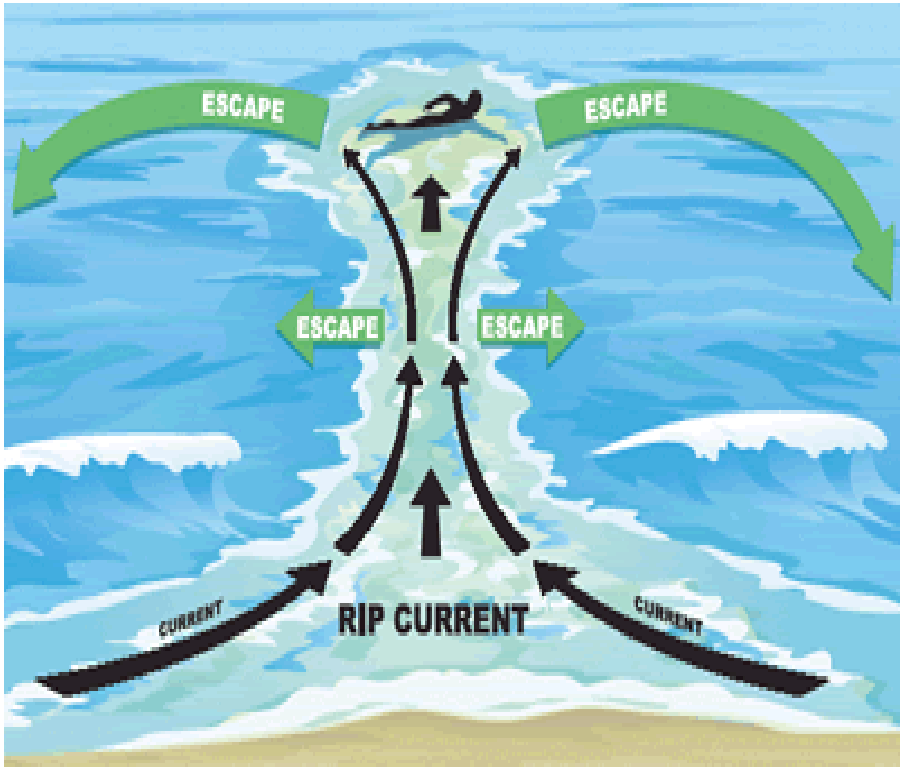
- ***Rip currents are the leading surf hazard for all beachgoers, and are especially dangerous for inexperienced and non-swimmers.***
- Swimmers who are caught in a rip current often do not realize what is happening, may not have the necessary water skills, may panic, or may exhaust themselves by trying to swim directly against the flow of water.
- Because of these factors, rips are the leading cause of rescues by lifeguards at beaches
- In the US, rips are responsible for an average of 100 deaths from drowning each year.

Rip Current

- **A rip current is *not* the same thing as 'undertow'**
- Contrary to popular belief, rip currents and 'undertow' do not pull a person vertically down and hold them under the water surface
- A rip current simply carries floating objects, including people, to an area outside the zone of the breaking waves.

How to Avoid and Survive Rip Currents

- ***Never swim alone!! Always be cautious!!***
- Swim at lifeguard protected beaches

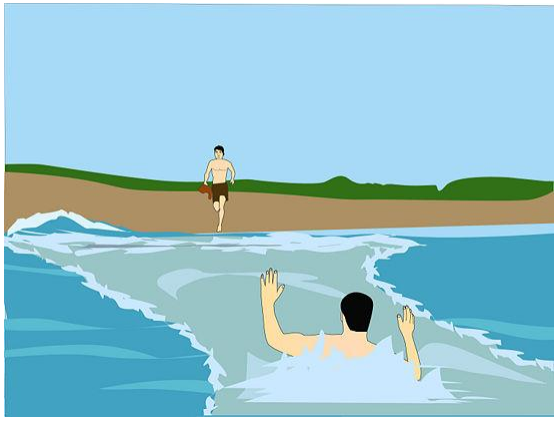


- If caught in a rip current, remain calm!
  - Conserve energy and think clearly.
  - Don’t fight the current.
  - Swim out of current in direction of shoreline.
  - When out of current, swim towards the shore.

How to Avoid and Survive Rip Currents

The rip is like a treadmill, which the swimmer needs to step off.

- If unable to swim out of the current, float or calmly tread water; when out of the current swim towards shore.
- If still unable to reach the shore, DRAW ATTENTION TO YOURSELF: Face the shore, wave your arms, and yell for help.
- If you see someone in trouble, find a lifeguard or call 9-1-1. Provide the victim something that floats and yell instructions on how to escape.



Finally:

- If you see someone in trouble, find a lifeguard or call 911. Provide the victim something that floats and yell instructions on how to escape.

- For More Information: http://www.ripcurrents.noaa.gov