




City of Corpus Christi's Gulf Beach Flag Warning System

Undertows, Rip Tides and Rip Currents


- Undertows are a misnomer for rip currents as are rip tides
- Rip currents are the most dangerous of the three



What is a Rip Current?

- Rip currents are strong offshore flows, and often occur when breaking waves push water up the beach face
 - This piled-up water must escape back out to the sea as water seeks its own level
 - Typically, the return flow (backwash) is relatively uniform along the beach, so rip currents aren't present
 - If there is an area where the water can flow back out the ocean more easily, such as a break in the sand bar, then a rip current can form
 - Rip currents are generally only tens of feet in width, but there can be several present at the same time spaced widely along the shore
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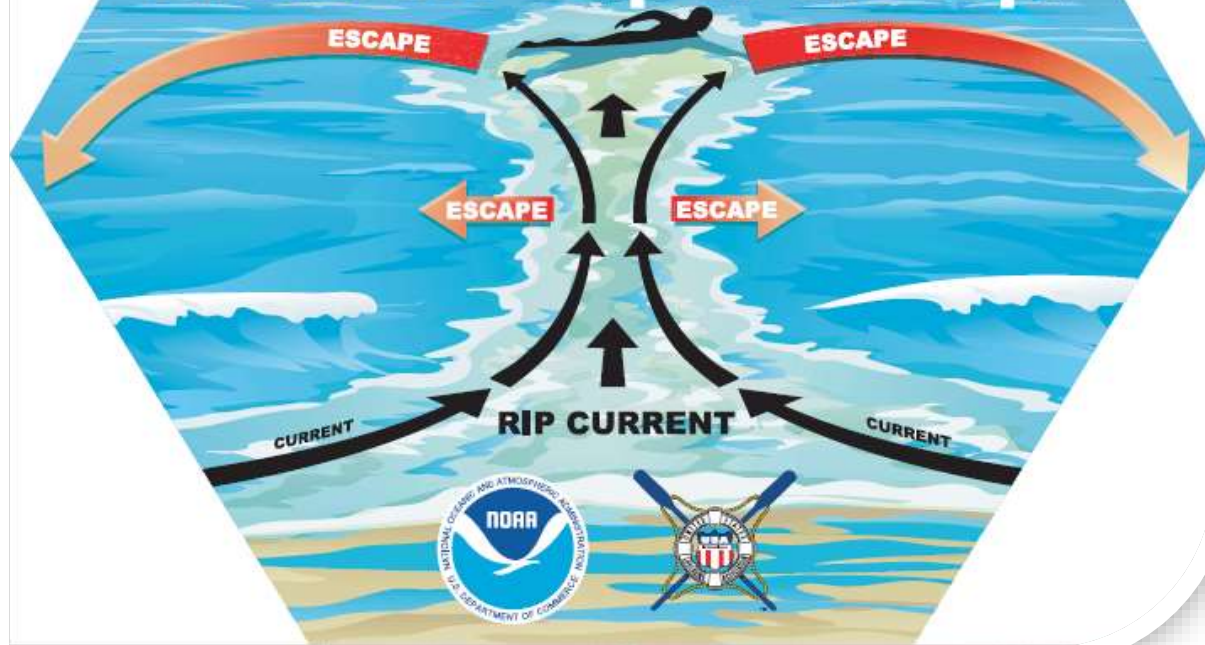
What is a Rip Current?

- Rip currents are often detected in about knee-to-waist high water; they can be difficult to escape by trying to walk back toward shore against the current once you are in chest-deep water
 - These strong, offshore-directed currents pull the water or someone at all water depths through the surf zone
 - The current only dissipates offshore of the breaking waves where the water can be quite deep - certainly over your head
 - Moderate waves (two-to-three foot) on sunny days are very appealing to swimmers but can sometimes generate strong rip currents
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www.ripcurrents.noaa.gov

Rip Currents

Break the Grip of the Rip!



Rip Currents


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


What is an Undertow?

- Every day, some 6,000 waves break on a given beach
 - The broken wave pushes water up the beach and gravity pulls the water back down the beach, as backwash
 - When big waves break on the beach, a large uprush and backwash of water and sand are generated; this seaward-flowing water/sand mixture is pulled strongly into the next breaking wave
 - Beachgoers feel like they are being sucked underwater when the wave breaks over their head - this is undertow
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What is an undertow?

- Bathing will be tumbled around roughly, but this return flow only goes a short distance to the next breaking wave
 - Undertows will not pull you offshore into deep water
 - Undertow is typically only dangerous for small children who can't walk up the beach face against the strong backwash flow
 - Remember that only experienced swimmers and surfers should enter the water on big wave days
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What is an Rip Tide?

- Rip currents are not rip tides
 - A distinctly separate type of current includes both ebb and flood tidal currents that are caused by egress and ingress of the tide through inlets and the mouths of estuaries, embayments and harbors
 - These currents may cause drowning deaths, but these tidal currents or jets are a separate and distinct phenomenon from rip currents
 - Recommended terms for this phenomenon include ebb jet or tidal jet
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City of Corpus Christi Beach Warning Flags



Current Flag Warning System

- 3' x 5' Beach warning flag signs are on all seven Lifeguard stands
- Two lifeguard stands will be placed at McGee Beach and five stands on the City of Corpus Christi's Gulf beaches



Lifeguard Stands Schedule

- Beach warning flags do not fly unless there are lifeguards in the stands
- When a lifeguard is in a stand, the top flag will be a white flag with a red cross followed by a green/yellow/red flag for surf conditions
- Gulf Beach Lifeguards are scheduled to be in the stands as stated below:
 - Saturday, May 28 – Monday, September 5
 - Monday-Thursday: 12:00 PM-6:00 PM
 - Friday, Saturday and Sunday: 10:00 AM-8:00 PM with a two-man team in the stands from 2:00 PM-4:00 PM

Posted Warning Signs

- Beach Access Road 2



Posted Warning Signs

- Packery Channel Boat Launch



Posted Warning Signs

- J. P. Luby
Beach/Zahn
Road/North Packery
Channel



Posted Warning Signs

- North Packery Channel Jetties as well as South Packery Jetties



Posted Warning Signs

- Beach Access Road 3A



Posted Warning Signs

- Michael Ellis
Beach/Seawall/Entrance to
Windward Drive parking lot



Posted Warning Signs

- Whitecap Blvd.



Posted Warning Signs

- Beach Access Road 6



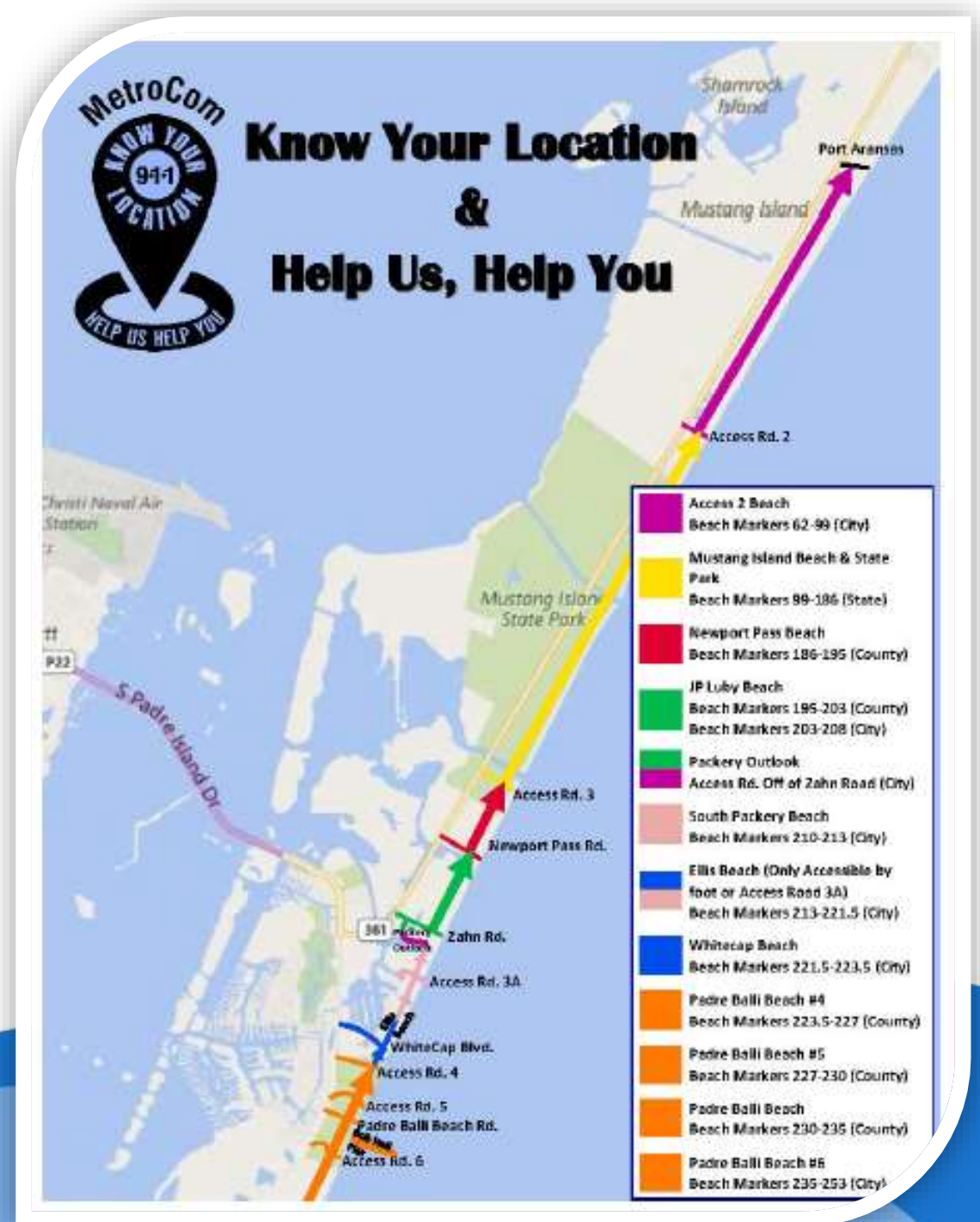
Know Your Location

- MetroCom created a solution for beachgoers to know their location in case of an emergency
- Color-coded signs and reflective tape corresponding to different areas on the beach




Know Your Location

- This informative map will be available at all lifeguard stands, beach rescue vehicles and code enforcement vehicles on the beach




Public Education of Beach Warning System

- Currently installing permanent 3' x 5' signs at the entrance to City of Corpus Christi's Gulf Beaches identical to those on lifeguard stands
 - Every day, lifeguards will mount that day's warning flags, based on surf and sea life conditions
 - If conditions change within the day, so will the flags that wave
 - Proposed times of flags to fly will be within 30 minutes of lifeguards arriving for duty and one hour before being on call:
 - Monday-Thursday 11:00 AM – 6:00 PM
 - Friday-Sunday 9:00 AM – 8:00 PM
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Public Awareness Campaign

- National Beach Safety Week and Rip Current Awareness Week begin the first Sunday of June and end seven (7) days later on the following Sunday

Beach Safety Tips

- Learn to Swim
 - Swim Near a Lifeguard
 - Do Not Swim Near Permanent Structures
 - Swim with a Buddy
 - Check with the Lifeguards
 - Use Sunscreen and Drink Water
 - Obey Posted Signs and Flags
 - Be Mindful of Debris in the Water
 - Keep the Beach and Water Clean
 - Learn Rip Current Safety
 - Enter Water Feet First
 - Wear a Life Jacket
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Conclusion

**When in doubt,
don't go out!**

cctexas.com

