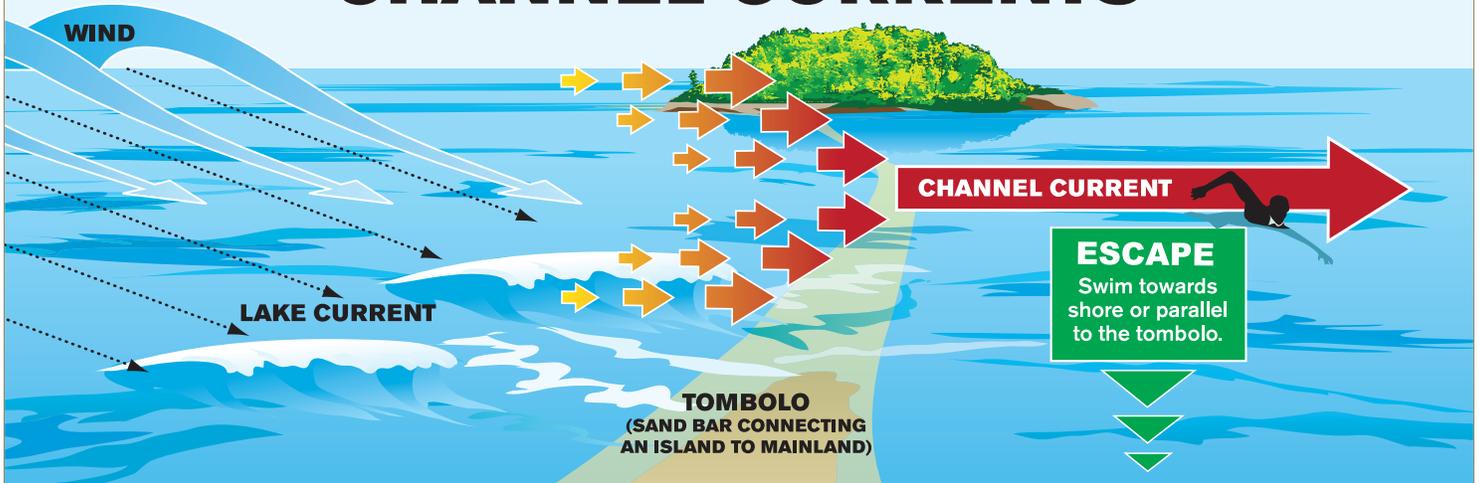


CHANNEL CURRENTS



In Michigan's Upper Peninsula, Marquette's Picnic Rocks along Lake Superior is a popular swimming place; it's also a place known for drownings. What makes this particular area dangerous? Experts have determined it is ripe for the creation of channel currents, often referred to as channeling.

WHAT IS CHANNELING?

Channeling is the result of channel currents and is compared to a river running parallel to the shore. Wind pushes water between the shore and some kind of structure, like an island. When the wind blows in the right direction, the water is forced through a narrow area, bottlenecking the flow and creating a strong current.

In particular locations, the presence of a tombolo – which is a partially submerged sandbar between the mainland and an offshore island – can exaggerate channeling, speeding up the water flow. A sandbar often makes the area more appealing to swimmers, which increases traffic and exposes more people to potentially dangerous conditions.

Where Does This Happen in the Great Lakes?

Channeling is not exclusive to Picnic Rocks, nor Lake Superior. The ingredients for channel currents exist in all of the Great Lakes. For example, Round Island

located just south of Escanaba, Hog's Island near Naubinway and Saddlebag Island near Detour have had incidents that mirror the drownings at Picnic Rocks. There are potentially many more areas that will be identified as awareness is spread and more research is conducted.

How is it Dangerous?

Channeling can become dangerous when swimmers are pushed off the sandbar or swept into colder water on either side of a sandbar. Often the swimmer panics and tries to get back to the "safety" of the sandbar. Trying to get back, however, pits the person directly against the flow of the current – which eventually will exhaust even the strongest swimmer.

If you witness someone caught in a current, call 911 and attempt to throw a flotation device to the swimmer. Enter the water with extreme caution: Often the person who goes in the water to help another person is the one to end up the victim.

IF CAUGHT IN A CURRENT...

Go with the flow. Don't out swim it, outsmart it.

The most important thing to remember when caught in a rip current or channel current is: do not fight it.

A rip or channel current will not pull you under, but will likely pull you further from the shore – which can be frightening but survivable. These tips will serve you well whether swimming in the Great Lakes or the ocean.

YOU CAN ESCAPE IT. REMEMBER:

- Do not panic. Remain calm.
- Ride the current until you can tell which direction it's moving. Swim perpendicular to the current.
- Think of the current as a river. You wouldn't try to swim upstream, against the current in a river would you?
- If you can't figure out which direction the current is flowing, tread water and call and wave for help.



Michigan Sea Grant enhances the sustainability of Michigan's coastal communities, residents, and businesses through research, outreach and education.

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