What makes the water between Northwest FL and AL so different?

Can the water color of the Emerald Coast show up in Alabama?



The water of Destin, Florida.

By **Tyler Sebree I** April 29, 2021 at 8:28 AM CDT - Updated April 29 at 8:28 AM MONTGOMERY, Ala. (WSFA) - If you've been to the Emerald Coast of Florida you certainly know how beautiful and Caribbean-like the water is. That includes the beaches of Destin, Fort Walton Beach, Navarre, Miramar Beach, Seaside, Panama City Beach, and even the eastern side of Pensacola Beach. It makes you feel as if you're somewhere on an island in the Caribbean far from any problems.



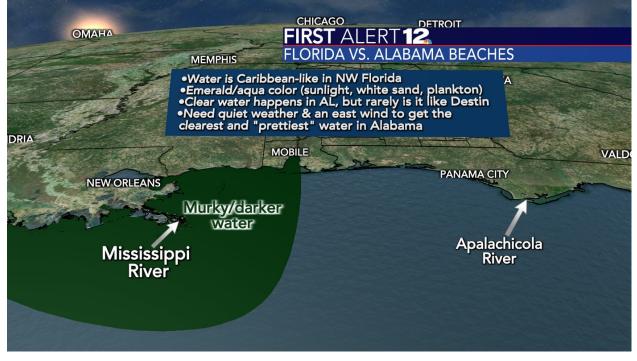
But when you go to the beaches of Alabama, things don't look quite like that. So what's up with that?

Don't get me wrong, the water is still very pretty along the Alabama coast. It's clear a good portion of the time, but it doesn't have that truly emerald or aquamarine color to it that the Northwest Florida beaches have.

There are a few reasons why that is...

1. The proximity of Alabama's beaches to the mouth of the Mississippi River

The discharge from the Mississippi River is murky, dark and anything but clear. Due to steering currents in the northern Gulf of Mexico, that water sometimes makes its way to the beaches of Baldwin and Mobile counties. As a result, you get water that isn't very clear; it looks more like what you get along the East Coast.



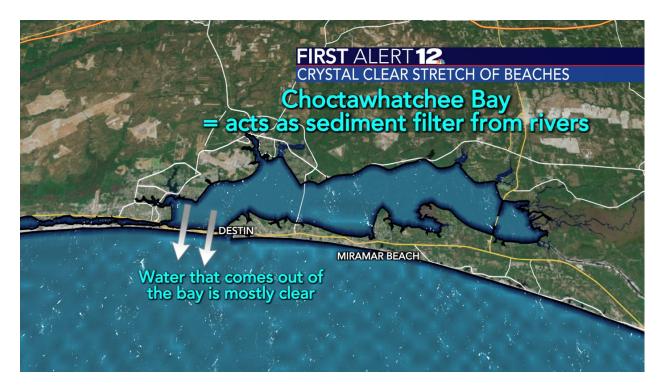
2. Presence of microscopic plankton along the Emerald Coast

In the coastal waters of Northwest Florida, there is a healthy supply of microscopic plankton. The plankton produce chlorophyll, which gives off the beautiful greenish color when the sun's light hits the water and underlying white quartz sand. The amount of sunlight, the clarity of the water, the amount of plankton present at a particular beach, and weather-related conditions like wind speed and direction, waves and recent rainfall all play a role in determining just how emerald the water is.

3. Choctawhatchee Bay in Destin

Believe it or not, the presence of Choctawhatchee Bay plays a key role in preserving the clarity and color of the Emerald Coast water. Rivers that empty into the bay contain

sediment and that murkier water we talked about above. But do to the bay's geographic location, it acts as a filter to prevent that murky water from making it to the beaches.



Doesn't the murky and darker water leave the bay, though? Well, there isn't a big opening into the Gulf from Choctawhatchee Bay. So not much water is leaving the bay and pouring into the Gulf. Not only that, but the bay actually has naturally filtered brackish inland drainage, according to Ocean Reef Resorts.

That keeps even the so-called "dirty" and murky river discharge in the bay relatively clear. So even if some of the water does enter the Gulf, it isn't going to alter the coloration of the water in Destin and other Emerald Coast beaches.

How to get the crystal clear, Caribbean-like water in Pensacola, Orange Beach, Gulf Shores, and Dauphin Island

Let's start off by saying that unless the wind has a westerly component to it, the water along Alabama's beaches is typically clear and blue. That's because only a wind from the west will send the discharge from the Mississippi River towards Alabama's coast. If you've had a recent rain, if the surf is choppy or if there's a lot of cloud cover you may not get the clearest of water along the Alabama beaches. But more times than not you're going to think the water from Dauphin Island eastward to Pensacola is very pretty and clear!

To get the clearest of water and that Caribbean look, though, you need an easterly wind to send that Emerald Coast water towards Alabama. You also want the waves to be minimal to avoid too much sand mixing in with the water. If it's a sunny day, the



The water of Destin, Florida.

weather is quiet and there's an easterly wind in place, your chance of seeing arguably the most brilliant water of any place in the U.S. along Alabama's beaches goes up! *Copyright 2021 WSFA 12 News. All rights reserved*.