

Explore the Unbelievable World  
of Lakes, Rivers and Waterfalls  
Hidden Beneath the Waves

# Awe-Inspiring Undersea Wonders

Waterfalls are among the most breathtaking sights. Some are famous for their beauty, others for their size. But even the most impressive falls are actually dwarfed by an enigmatic class of impossible waterfalls. Likewise, there are entire lakes with their own ecosystems that exist in a zone where most people believe them to be impossible... under water!

Discover the incredible and virtually unknown phenomenon of underwater lakes, rivers and waterfalls.



The Talmud (*Chulin 127a*) informs us that “Everything on land exists in the sea, except the weasel.” From this context it is clear that the Gemara is referring specifically to living things. We know of the existence of many sea creatures that are analogous to animals found on land. Examples include seahorses, sea cows (manatees) and sea snakes (actual sea snakes and eels), to name just a few.

In recent decades, though, oceanographers have discovered geographic features under the sea that were previously thought to be unique to *terra firma*. In fact, most of us cannot imagine how a lake, river or even waterfall could possibly exist within the ocean.

Around 71% of the Earth’s surface is under water, yet to date we have explored less than 5% of the ocean floor. Scientists believe that the sea still has many secrets waiting to be discovered. Join us for a fascinating tour of some of the most wondrous wonders of Creation that have only recently been discovered hidden under the sea.

## A World to Discover

Beneath the ocean waves, hidden from our view, lies a world so vast that it boggles the mind. We are impressed by tall mountains, deep valleys and mountain ranges that extend for hundreds of miles across continents. Yet all of these are easily outdone by their equivalents beneath the sea.

For example, the longest mountain chain on land is the Andes, which snakes down the western coast of South America. Running through seven countries along the way, it extends for 4,350 miles. Compare that to the Mid-Atlantic Ridge, which runs from the Arctic Ocean, down the center of the Atlantic and then turns upward near the southern tip of Africa—a total length of 10,000 miles!

Yet, that is not all. The Mid-Atlantic Ridge is just a portion of the mid-ocean range, a mountain chain that runs through all of the world’s oceans. It covers nearly 1/4 of the

Earth’s surface, is home to tens of thousands of active volcanoes and extends for 50,000 miles!

Visitors to the Grand Canyon are awed by its sheer size and majesty. It measures 277 miles long, 18 miles across at its widest and 6,000 feet down at its deepest. Impressive. Yet the Mariana Trench in the western Pacific, just east of the Mariana Islands, runs 1,580 miles long and averages 43 miles across. That’s big enough to swallow the Grand Canyon several times over!

At its deepest point the Mariana Trench descends 6.8 miles down. This spot, known as Challenger Deep, is the lowest depression from the Earth’s surface. If you placed Mount



A colorful seahorse at a Hamburg, Germany aquarium.



View of Earth taken in December 1972 by Apollo 17’s crew as they returned from the Moon. Around 71% of the Earth’s surface is covered by water.

Everest at the bottom of Challenger Deep, its peak would still be covered by 1.3 miles of water!

Eminent undersea explorer Dr. David Gallo sums up the exciting world beneath the ocean: “There are thousands of peaks higher than the peaks in the Alps. There are thousands of valleys many times wider, deeper and longer than the Grand Canyon. There are underwater rivers; there are underwater lakes; and there are underwater waterfalls. There’s life where we never expected life at all....

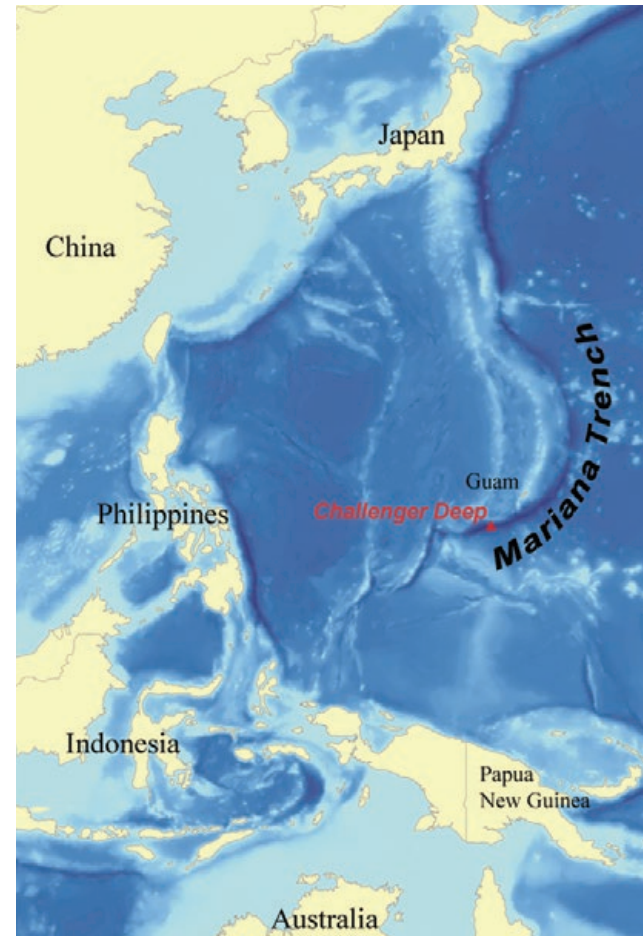
“Almost every time we go into the ocean with a new piece of technology, almost every time, we’re surprised. Sometimes we’re

startled and in some cases we see something that’s totally revolutionary.... When you dive, when it’s pure exploration in the darkness of the deep sea, you never know what to expect.”

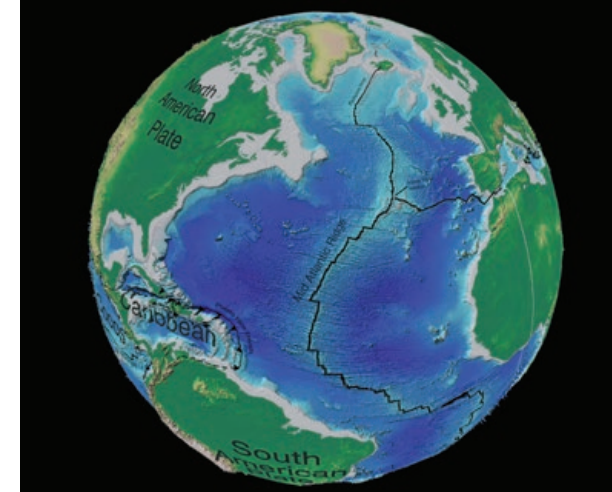
## Underwater Lakes

The scene has been repeated many times by now. Oceanographers concentrate on the seabed ahead of them, peering through the murky darkness only partially illuminated by their submersible’s powerful headlights. Suddenly they come across a scene so familiar that it’s absolutely eerie.

Looming in front of them is a shimmering,



Map of Mariana Trench showing its deepest spot, Challenger Deep. Located on the Pacific floor, it is the world’s largest canyon.



The Mid-Atlantic Ridge, which runs from the Arctic Ocean, down the center of the Atlantic and then turns upward near the southern tip of Africa—a total length of 10,000 miles!



Majestic view of the Grand Canyon. Its grandeur is dwarfed by the sheer magnitude of the Mariana Trench.