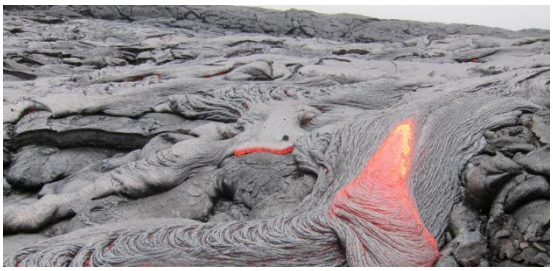
An erupting volcano – destructive or productive?

At first glance, a new lava flow looks like a static orange-red column extending from its crater, slowly seeping towards the sea—steady, stately. But when you peer closer, you can see the lava bubbling and hissing, the air around it writhing in the 2,000-degree heat. It seems like a Biblical torrent of brimstone, designed to wipe out life entirely and begin anew. Do you wonder if anything could possibly survive this?



The answer, is mostly nothing, nothing can survive this powerful action. In the areas where lava is entering the sea, there is essentially no marine life left at all, as the bottom is being constantly recreated by the new lava rock. The waters around the lava flow are so blistering that not even microscopic plankton could survive in them. The waters around an eruption can become so choked with pumice and ash that birds, marine mammals, and plants die.

In most cases, destruction isn't as disastrous as it seems. In fact, in the right circumstances a massive eruption like the one you just watched can give ecosystems / life a big boost. The changing conditions don't just wreak havoc; they spur new life. This new life is:

Plankton – which is the beginnings of all marine life. Click the link to find out more about Plankton.

Hawaii, the region shown in the video, an abundance of plankton in the sea would attract other marine life—manta rays, whale sharks—that feed on the organisms. And the change in temperature can draw in marine animals for other reasons; although humpback whales only feed on Arctic krill and small fish, some scientists have reported seeing the whales swimming through the unusually warm columns of water around the Kīlauea, Hawaiian coastline.

The lava flow itself could even be the tip of the iceberg; there may be more lava flowing under the water as well. If that's the case, the flow might copy what happens underwater volcanoes and hydrothermal vents that draw bustling marine ecosystems, from bacteria and barnacles to shrimp and crabs. These vents provide energy from a source other than the sun, where living creatures survive off chemicals and not light from the sun. Giving marine life plenty of food to thrive on!