Between 2010 and 2018, a large lava lake bubbled and spattered within Kilauea’s summit caldera. Then in May 2018, as part of a broader eruption that poured lava from fissures to the east, the lake swiftly drained and part of the caldera floor collapsed. This left a hole nearly as deep as One World Trade Center.

For about a year, the much-deeper and wider Halemaʻumaʻu crater was relatively quiet. But in July 2019, helicopter pilots began to notice water pooling into a pond in the lowest part of the crater. Water levels have risen steadily ever since. Today, the lake—now with a rusty brown sheen on its surface due to chemical reactions taking place in the water—has an area larger than five football fields combined and a maximum depth of roughly 30 meters.

There are some great ground photos taken by Matt Patrick and other scientists at the Hawaiian Volcano Observatory. At left we see the water lake on January 17th, 2020, and at right is a thermal image, obtained June 2nd, 2020, with roughly the same field of view.