

Living In Sinkhole Alley

Sep 11, 2013 By Deepa Gopal



Sinkhole opens up under Florida resort; Courtesy

Can you imagine the ground giving way under your feet? Last month, vacationers at a Florida resort woke up to windows breaking. They were quickly evacuated before a 15-foot deep and 60-foot wide hole swallowed a part of the building!

Sinkholes are a reality of living in Florida, just as hurricanes, sunny weather and warm beaches are. The area between Tampa and Orlando in Florida is known as sinkhole alley. However, with commercial development and builders pumping out water for new projects or agricultural use, the problem is getting worse.

Unlike hurricanes, it is hard to predict when a sinkhole will open up. Recently, the U.S FEMA (Federal Emergency Management Agency) has given a \$1 million grant to Florida to map out areas across the state that are prone to sinkhole activity.

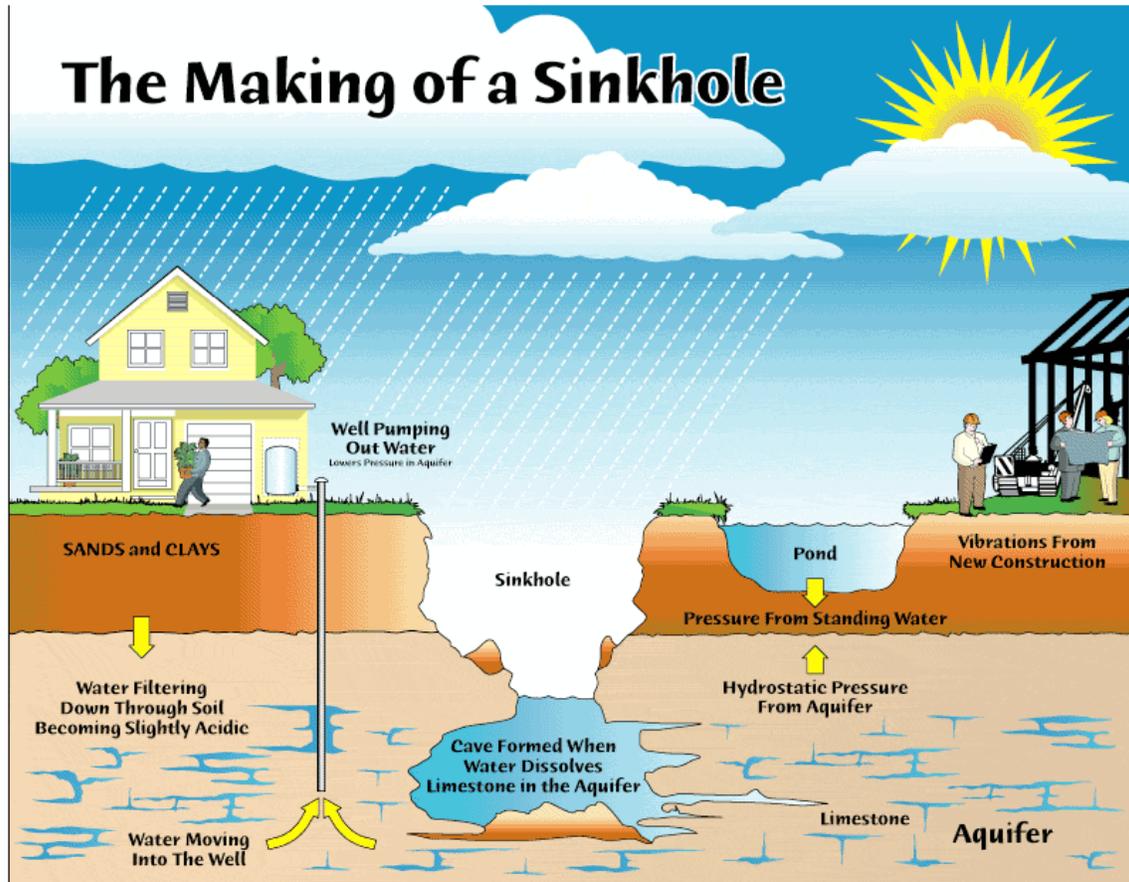
What Are Sinkholes?

Sinkholes form when the ground underneath the surface gives way. This could happen for several reasons: when the soil gets saturated with water and becomes too heavy, it collapses crushing the voids in between. If there is already a big fracture in the layer below the surface – say the layers are made of highly porous limestone karsts, then water seeping through can expand the cracks and suck the topsoil in.

In Texas, in 2008, a sinkhole opened up in an area where oil was being drilled. This one could have been caused by the process of oil drilling itself, experts believe. Oil drilling produces salt water and this was being stored underground. This water could have saturated the soil to such an extent that it became too heavy and caved in, crushing the natural air pockets soil has.

Read the article and underline anything you feel is important.

Choose the one word or phrase that you believe is the most important in the entire article. Be prepared to explain your choice.



Courtesy: State of Florida website

A Hole By Any Other Name

Sinkholes are sometimes called snake holes, swallow holes, cenotes, dolines, swallets, or simply a sink. They are basically formed by some kind of erosion underground – either by percolating water, or by human activity: like mine shafts and underground tunnels, that causes a roof of some void to collapse. If the bedrock (rock below the soil) is made of limestone or a carbonate that is soluble in water, it is more likely to form a sinkhole under the right circumstances.

Brainstorm:

If you were living in Florida, what could you invent to help stop sinkholes from forming? Be creative! In 2-3 paragraphs, explain your invention or idea.