

You wake up one morning,

look out your front window, and discover a large crater-like hole on your property. Taking a closer look, you realize that you are looking at one of Florida's natural phenomena: a sinkhole. Scratching your head, you wonder what to do now.

If this should happen to you, you're not alone. More sinkholes occur in Florida than in any other state. Many Florida lakes, including most of those found within the 15-county Suwannee River Water Management District, once began as sinkholes.

Sinkholes come in all sizes. They are unpredictable, but they all develop in basically the same way. As rainwater seeps into the ground, acid in the water dissolves the thick layers of underground limestone that underlie the entire state. This creates big, empty underground holes or gaps. If the layers of sand and dirt which sit on top of the limestone fall into these holes and gaps, the result is a sinkhole.

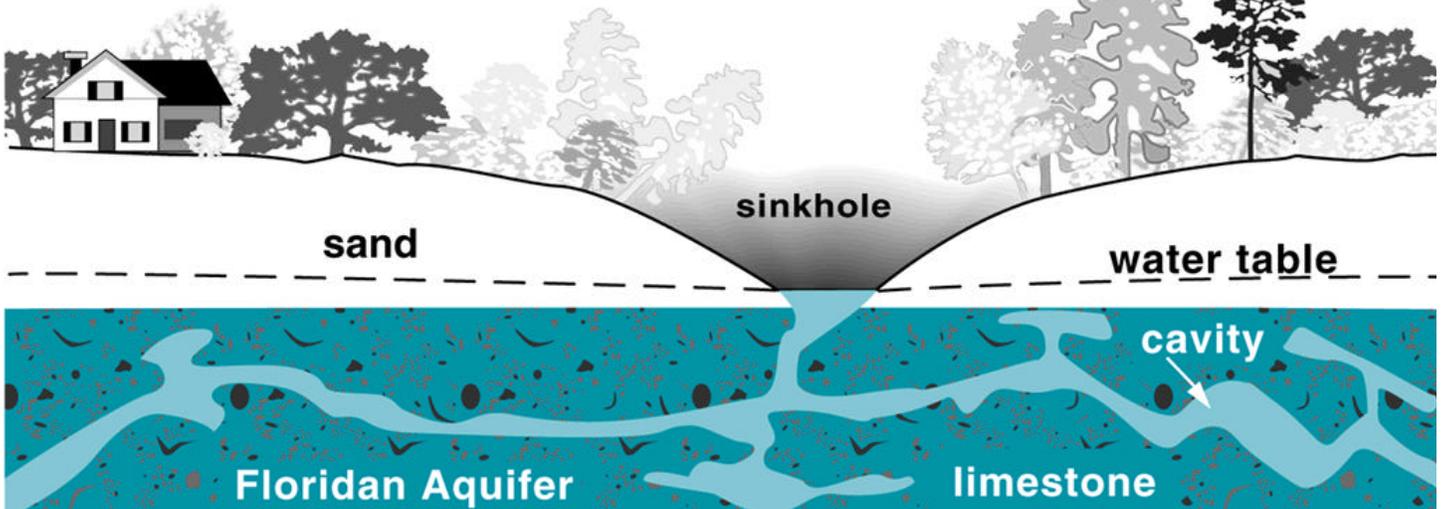
There are many types of sinkholes, but the two occurring most often within the SRWMD are collapse and solution sinkholes.

A collapse sinkhole forms suddenly as the weight of the overlying soil suddenly becomes too great, and the earth collapses until it fills the limestone cavity. At land surface, a circular hole appears, which may or may not contain water. Factors that may contribute to the collapse include:

- large changes in the water table caused by too much or too little rain
- drilling a well into the cavity
- pumping groundwater from near the cavity
- constructing buildings above the cavity
- diverting drainage to the areas where a cavity exists.

A solution sinkhole, on the other hand, develops slowly and continuously. It forms where sand or other relatively thin materials slowly and steadily sprinkle downward to fill the cracks and joints that occur in the underground limestone layers.

As a sinkhole gets bigger, it collects more surfacewater runoff which commonly carries sand, silt and clay particles. This material can sometimes plug the sinkhole, thereby creating a lake or pond. Lakes that once were collapse sinkholes can sometimes unplug and drain into the underground aquifer. If the lake becomes polluted, this can be a health hazard to people whose drinking water wells tap into the connected aquifer.



WARNING SIGNS FOR SINKHOLES

- fresh exposures on fence posts, foundations and trees
- slumping, sagging or leaning fence posts or trees
- doors and windows that fail to close properly
- structural failure such as cracks in walls, floors and pavement or cracks in the ground surface
- formation of small ponds after it rains, where water has not collected before
- small, circular patches of wilting vegetation
- muddy well water
- deep, narrow, vertical (chimney-like) holes in the ground that lead directly to the aquifer. Their lack of gradual, sloping sides makes them especially dangerous, since falling into one is like falling down a chimney. Holes resembling "chimneys" should be fenced, and reported to your county emergency management coordinator.

EXAMPLES OF SINKHOLE LAKES

Alligator Lake - Columbia County

Lake Louise - Suwannee County

Cherry Lake - Madison County

Ocean Pond - Bradford County

Lake Octahatchee - Hamilton County

WHAT TO DO IF A SINKHOLE FORMS

- Contact your county emergency management coordinator for assistance.
- Keep children away.
- Place a fence, rope or tape around it. Property owners usually are held liable if someone is hurt in a sinkhole.
- Do not throw any type of waste into a sinkhole, and do not use it as a drainage system. Pesticides, oils, chemicals and other wastes seep easily through sinkholes and into the aquifer where your drinking water comes from.
- Watch for signs of sinkhole enlargement, especially toward buildings, septic tanks, drain fields and wells. Sinkholes follow the path of least resistance.
- If you require additional information or assistance, contact the Suwannee River Water Management District's Department of Resource Management at 904/362-1001 or 800/226-1066. Staff will take your report, visit the site, and provide you with additional information