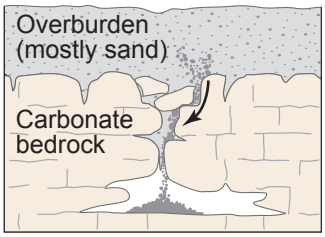
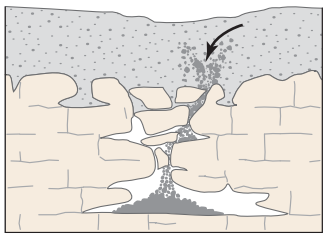
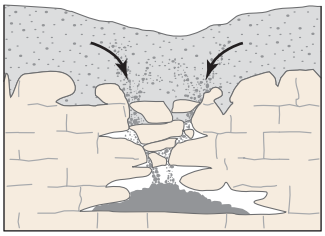
Cover-subsidence sinkholes tend to develop gradually where the covering sediments are permeable and contain sand.



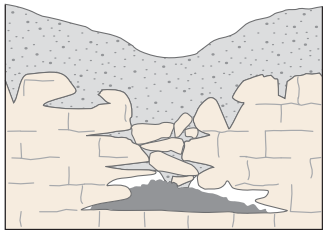
Granular sediments ravel into secondary openings in the underlying carbonate rocks.



A column of overlying sediments settles into the vacated spaces (a process termed “piping” or “raveling”).



Dissolution and infilling continue, forming a noticeable depression in the land surface.



The slow, downward erosion eventually forms small surface depressions 1 inch to several feet in depth and diameter.

In areas where cover material is thicker or sediments contain more clay, cover-subsidence sinkholes are relatively uncommon, are smaller, and may go undetected for long periods.

Source: Modified from Tihansky (1999)

Duke Energy Florida

Levy Nuclear Plant
Units 1 and 2
Part 2, Final Safety Analysis Report

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FIGURE 2.5.1-241

Rev 6