



Known as the **doomsday** glacier, the Thwaites Glacier in Antarctica is in danger of collapsing, according to scientists.

The glacier is the size of Florida, and it currently adds to 4% of the annual global sea level rise. Now, scientists are warning that a part at the front of the glacier could collapse within the next five to ten years. They say that this doomsday **scenario** may not happen for centuries; however, when it does, the effect will be a disaster. If the glacier collapses entirely, there would be about 60 centimeters of sea level rise over the entire planet.

Research suggested that when it happens, it might cause a bigger collapse of the west Antarctic ice sheet. The ice sheet is a large group of glaciers in Antarctica. The Thwaites Ice Shelf is an underground shelf holding the glacier, and it is likely to collapse within a decade. This will lead to a complete **disintegration** of the Thwaites Glacier over time of coming centuries.

In 2020, scientists discovered warm water under the glacier for the first time. The melting of the glacier from warmed ocean water seems to be stronger than expected. Researchers noted with concern that at the base of the glacier under the water, the temperature of that water is already more than two degrees above freezing.

Difficult words: **doomsday** (the end of the world, or a time when something very bad will happen), **scenario** (a description of possible actions or events in the future), **disintegration** (the process of being destroyed by breaking into small pieces).

**Discussion Questions****Topic Talk**

1. Define the following words: *doomsday*, *scenario* and *disintegration*
2. Why are scientists worried about the Thwaites Glacier collapsing?
3. What happens to the meltwater from the doomsday glacier?
4. In how many years' time do scientists predict the Thwaites Glacier could collapse?
5. What might happen if the entire Thwaites Glacier collapsed?
6. What causes the rapid melting of the ice beneath the Thwaites Glacier?

Express Your Thoughts

1. Had you known how huge the Thwaites Glacier before you learnt about this news?
2. Why do you think the Thwaites Glacier is also called the doomsday glacier?
3. Being one of the largest glacier in Antarctica, what would happen to the neighbouring glaciers if the Thwaites Glacier collapsed?
4. How catastrophic would it be if the Thwaites Glacier collapsed and dragged other glaciers into the ocean?