



This process releases carbon dioxide and methane into the atmosphere.

1
00:00:04,590 --> 00:00:08,800

As the Arctic warms, some of its lakes are bubbling...

2
00:00:13,040 --> 00:00:17,040

Earth's warming climate is thawing permafrost – the Arctic's permanently frozen layer of soil.

3
00:00:21,370 --> 00:00:25,600

As the permafrost thaws, microbes in the soil wake up and begin consuming once-frozen organic material.

4
00:00:29,830 --> 00:00:34,020

This process releases carbon dioxide and methane into the atmosphere.

5
00:00:38,290 --> 00:00:42,410

Scientists have known about this source of atmospheric carbon – a greenhouse gas – for some time.

6
00:00:46,680 --> 00:00:51,040

They have predictions about how long it will take for the carbon stored in permafrost to reach the atmosphere.

7
00:00:55,230 --> 00:00:59,430

Newly forming lakes in the region can throw a wrench in these predictions. Called thermokarst lakes, they form